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100 Games Rated!

COMPUTER GAMING WORLD

The Premier Computer Game Magazine

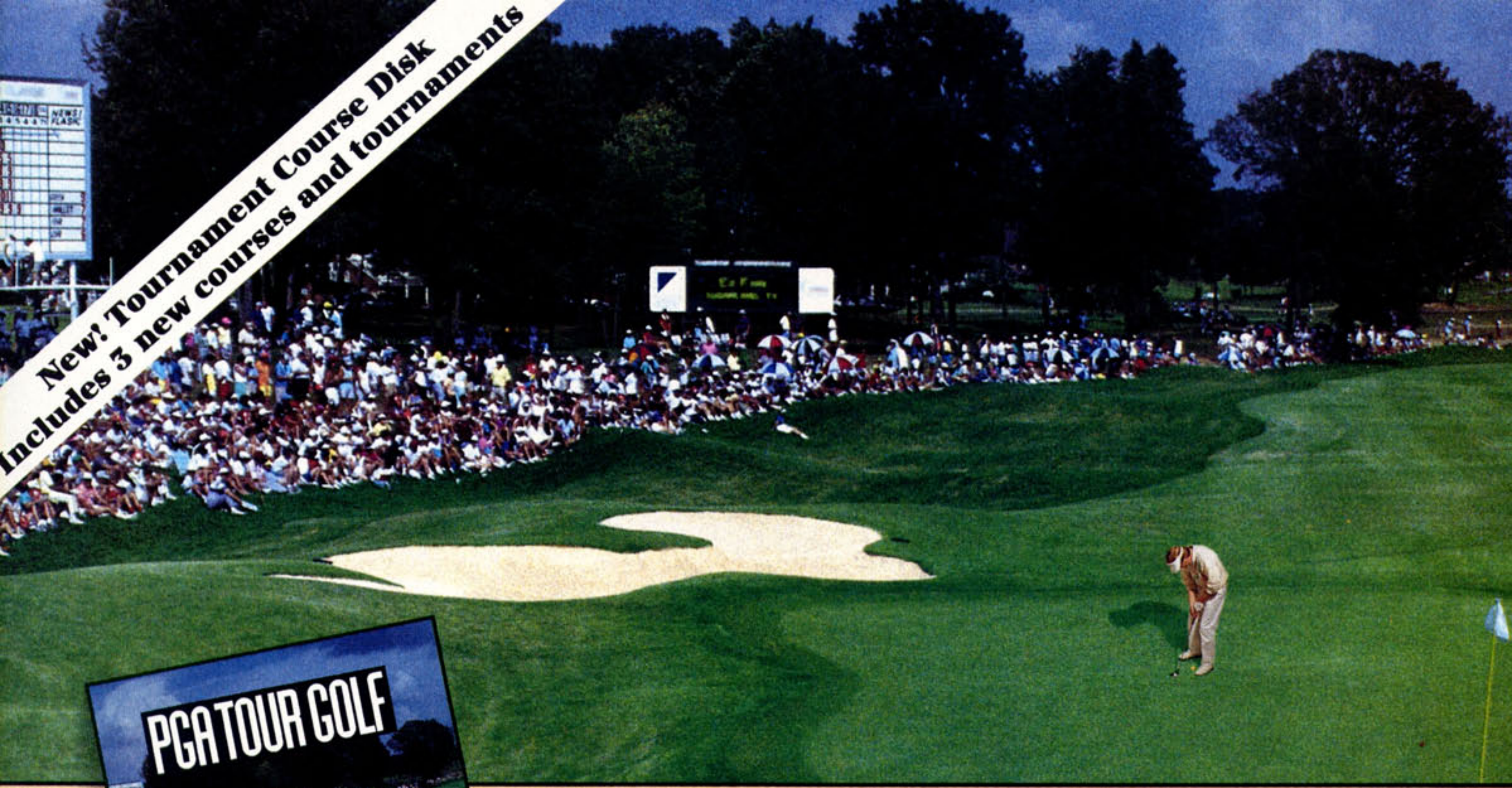


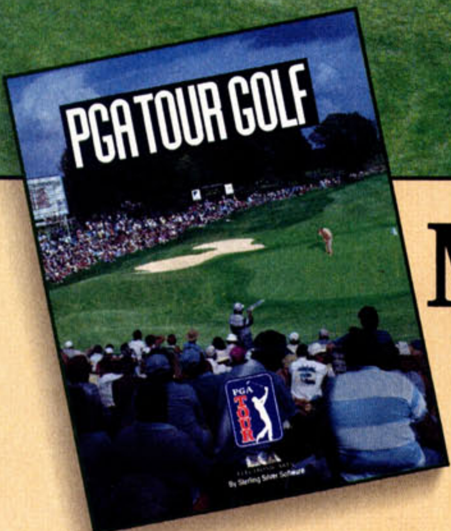
CGW Rockets Into Its Second Decade

Disney's *The Rocketeer*

Inside: Guided Tour of Computer Game History

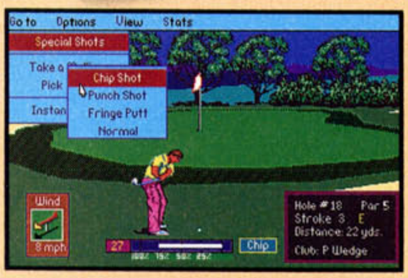
10th Anniversary Issue





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This issue celebrates *CGW's* tenth year of publication. From the lofty vantage point of issue #88 we stop, turn around and look back. Often we are so involved in trudging along and choosing which path to take, we lose sight of how far we have traveled up the mountain. Well, here we are. Time to stop and take a breather.

Whew! Ten years! Eighty-eight issues! That's a lot of writing and a lot of games. Ten years of covering hundreds of companies who have published thousands of computer games. From this unique vantage point, we have the privilege of considering the mountain flower as well as the mountain panorama.

You, our readers, have been both our fans and critics. That pleases us. We're glad you like *CGW*. We're also glad that so many of you take time to write thoughtful letters expressing your likes and dislikes. In the very first editorial in *CGW* #1, in November 1981, we said, "We hope that *CGW* will become a forum for an intelligent dialogue between gamers, designers, manufacturers, and retailers." A major reason *CGW* has reached the position of being the *premier* computer gaming magazine is that we have always tried to keep that goal in mind.

This issue features, among other things, a history of computer gaming which we think will become the standard work on the subject for the foreseeable future. Last issue, Scorpia presented you with a role-playing game survey unmatched anywhere in the computer game industry. This issue, Evan Brooks begins an epic survey of more than 220 computer wargames. A major overhaul of the way we present the Reader Input Device data can be found in the center of this issue, along with details in the editorial on the new **CGW Poll**.

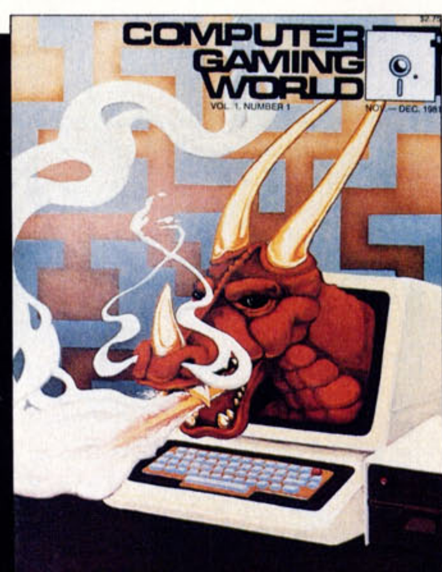
In addition to the magazine, the staff of *CGW* has for three years served as online Experts on the **Prodigy Information Service**. We are about to release the first book in the **Computer Gaming World Presents** bookline: *Chuck Yeager's Air Combat Handbook*. Last, but not least, we are proud to announce that as the U.S. version of *Computer Gaming World* celebrates its tenth year, we now have a **Chinese edition of CGW** published in Taiwan.

Well, that's what it looks like from here. Let's resume the climb!

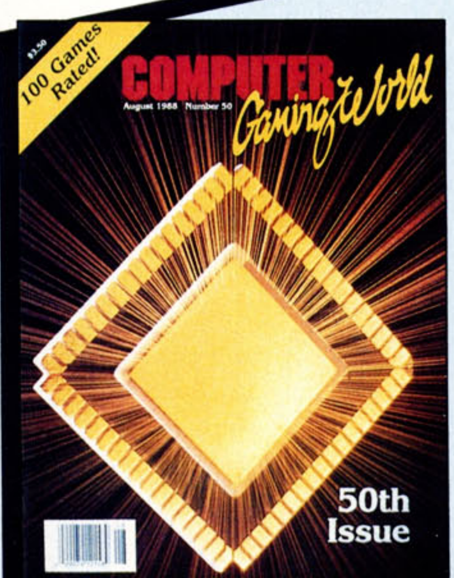
Russell Sipe



Signing the agreement to publish the Chinese edition of *CGW*.



Issue Number One



Issue Number Fifty

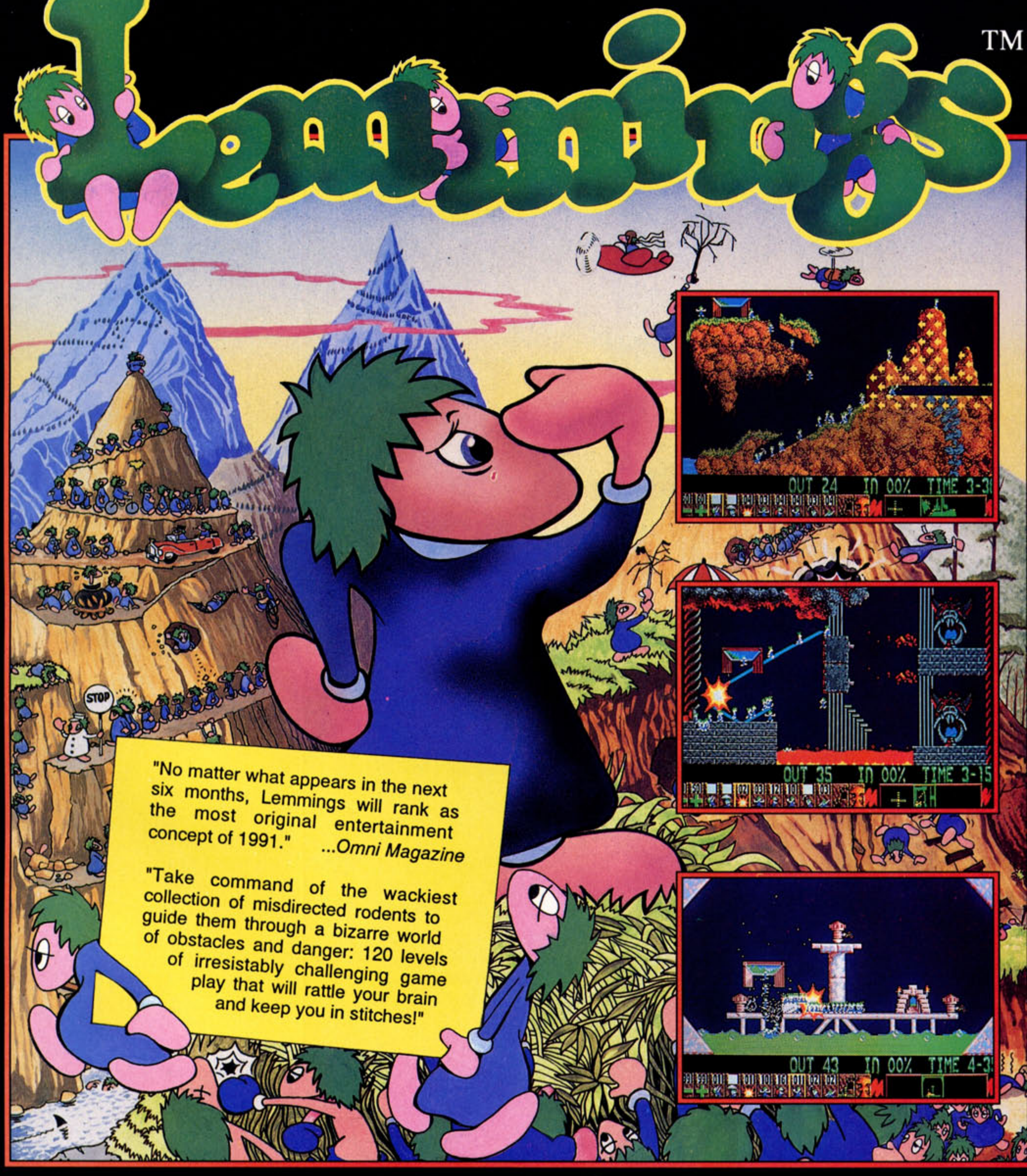
November 1991 Number 88

Covering the World of Computer Games for Eleven Years

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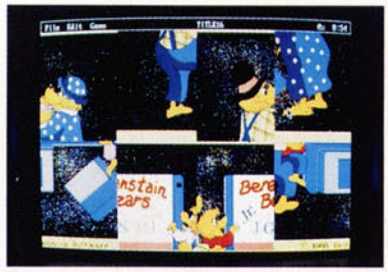
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Psalms 9:1-2

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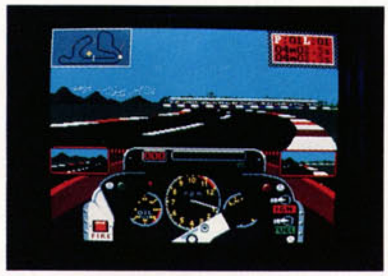
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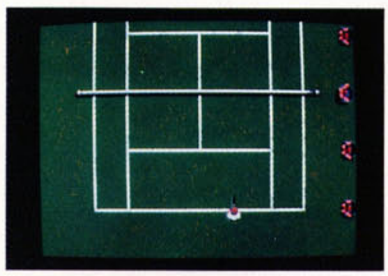
Exotic Car Showroom



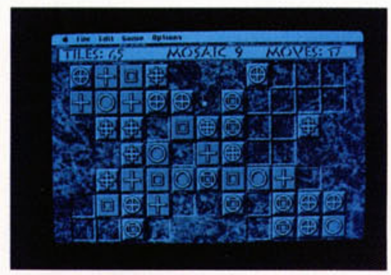
Ferrari Formula One



Big Business



Tie Break Tennis



Tesserae

Access Software, Inc.
Salt Lake City, UT

LINKS: PINEHURST RESORT AND COUNTRY CLUB: Truly one of the finest golf resorts in the world, Pinehurst Number Two (of seven) is represented in this expansion course disk for *Links*. The rolling terrain and tree-lined fairways make this course particularly challenging. The course disk serves as another fine supplement to those terrific *Links* graphics. IBM ($24.95). Circle Reader Service #1.

Accolade
San Jose, CA

JACK NICKLAUS' COURSE DESIGNERS CLIP ART VOLUME 1: Something to fill the canvas for golf course designers, plus a complete new course. Finished objects for course designers include new trees, golf carts, buildings, etc. The scenery goes with the new landscaping for seaside, parkland and desert courses. Not only can players have a great time designing courses, but they can also play a round at the Desert Highlands Golf course (home of the high-stakes, high-pressure "Skins" Game). IBM, Amiga ($24.95). Circle #2.

Britannica Software
San Francisco, CA

THE BERENSTAIN BEARS JUNIOR JIGSAW: It seems like there are plenty of computer puzzle programs out for tots — the trick is "piecing together" which one has the best features. With *The Berenstain Bears*, players can have a choice of 8-, 15-, 40- and 60-piece puzzles to build with an optional sound toggle to indicate when a piece has been place correctly. Unfortunately, none of the puzzles were pictured in the documentation, so kids will have to hunt around and remember file names to find their favorites. Parents will have to stay close to help with all of the small-typeface DOS features that have to be dealt with between puzzles as well. For ages four to ten. IBM ($24.95). Circle Reader Service #3.

Capstone Entertainment Software
Miami, FL

EXOTIC CAR SHOWROOM: The name says it all. This software package is *not* a driving simulator and is *not* an expansion disk for one. It *is*, quite simply, a showroom database of graphics and statistics for exotic cars. Among the fifteen cars on display are the De Tomaso Pantera, Acura NSX, Lotus Turbo Esprit and Gemballa Mirage. One can look under the hood, check out the interior, compare two cars side-by-side and otherwise peruse these pricey chariots. IBM ($19.95). Circle Reader Service #4.

EXOTIC CAR SHOWROOM & SUPER CAR PACK: Everything mentioned above, *plus* **Electronic Arts'** *Ferrari Formula One* (pictured) and **Accolade**'s *Grand Prix Circuit*. Essentially, one can do more than just look around the showroom with the inclusion of these two popular driving simulators included in this trilogy pack. In *Ferrari Formula One*, the player designs and fine-tunes his car before racing it on the test track and 16 grand prix courses. *Grand Prix Circuit* is a straight speed and tight turn driving simulator among the best of them. IBM ($59.95). Circle #5.

DigiTek Software
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BIG BUSINESS: For everyone tired of serious business simulators which ex-

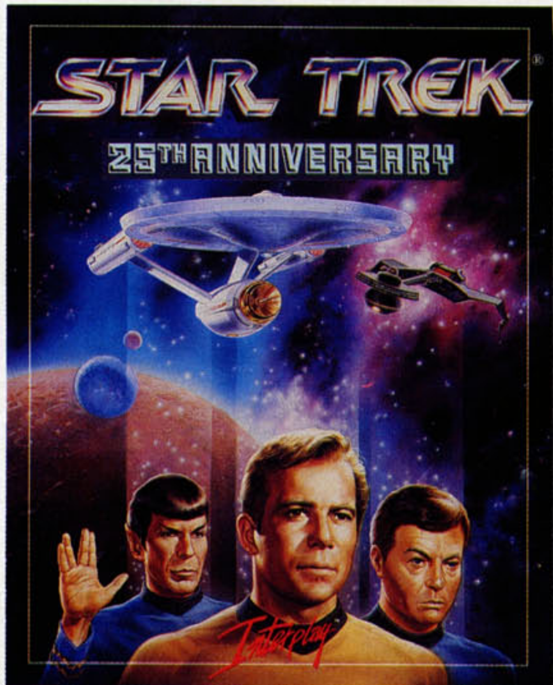
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Circle Reader Service #39 >>

THE VOYAGE CONTINUES!

STAR TREK: 25th Anniversary™.

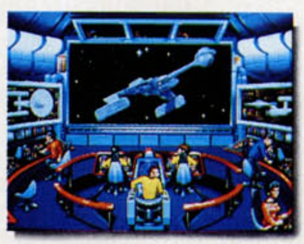


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Interplay™

Interplay Productions
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amine actual markets and the laws of supply and demand, here's something *really* silly. *Big Business* is accurately subtitled "a semi-realistic wacky business simulation" and is full of plenty of sophomoric humor (something like Meretzky in Businessland). A player's marketing head is a sleaze, the R&D manager is a nerd and the finance officer (Jane Dough) is... well, best left undescribed. Players choose from a variety of commodities (from nuclear bombs to toilets) to produce, while bidding in the market to buy, sell and manufacture goods, finance growth, undermine the competition and generally prove the term "business ethics" to be oxymoronic. Comes with a second game included, *Wall Street* (a more serious stock market simulation). IBM ($49.95). Circle Reader Service #6.

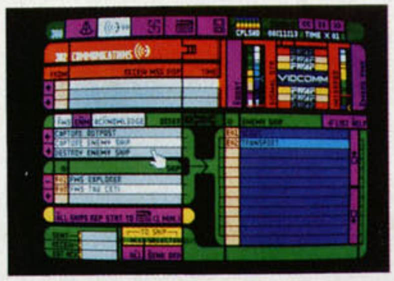
TIE BREAK TENNIS: Strictly for the purist, this is another of the highly detailed, heavily arcade-driven tennis simulators. With a distinctive television look and sound, the game allows players to participate in singles or doubles matches, tournaments or training games. Many combinations of arcade responses allow players to use a wide variety of ways to hit the ball (provided, of course, that one can react that fast). One particularly interesting feature is that a player can choose different rackets, whose weight and tensions will affect play. Those who like *Pro Tennis Tour 2* will want to take a look at *Tie Break Tennis*. IBM ($39.95). Circle #7.

Inline Design
Sharon, CT

TESSERAE: Cut from the same cloth as *Ishido*, *Darwin's Dilemma* and *Shanghai*, *Tesserae* is a game of removing a board full of tiles by "jumping" them, checkers-style. The strategy rub is that some jumps actually remove tiles, while other jumps combine the shapes and colors, making them more difficult to remove. Several different board styles and starting piece difficulty levels are provided. The on-line instructions are a real plus. Macintosh ($49.95). Circle Reader Service #8.

LightBulb Logic
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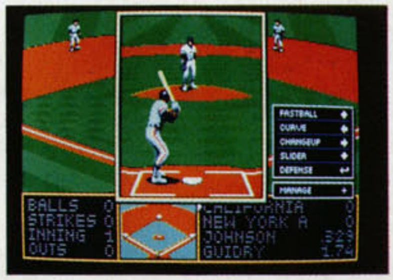
COMRADE: This is nothing more or less than a game accessory for the Russian *Tris* games. With *Comrade*, players can use any pointing device (mouse or trackball) to play *Tetris*, *Welltris* and *Faces*. Additionally, this software allows



Rules of Engagement



Gateway to the Savage Frontier



Tony LaRussa's Ultimate Baseball



Vengeance of Excalibur

for adjusting the speed of these games. *Comrade* is definitely a wrist- and finger-fatigue saver. IBM ($19.95). Circle Reader Service #9.

Mindcraft
Torrance, CA

RULES OF ENGAGEMENT: Putting the player in the role of a fleet commander, *Rules of Engagement* links up to the tactical game *Breach 2* whenever boarding actions occur, although either game can be played as a stand-alone product. Like *Breach 2*, *Rules of Engagement* includes a variety of scenarios, including a complete mission builder. Everything is "push-button," so no arcade-like reflexes are required. The busy screens can be quickly assimilated via a tutorial at the front of the manual and the game's use of color and flowchart-like displays. IBM ($59.95). Circle Reader Service #10.

Strategic Simulations, Inc.
Sunnyvale, CA

GATEWAY TO THE SAVAGE FRONTIER: Expanding the "Gold Box" line of *AD&D* games to include new sections of The Savage Frontier, *Gateway to the Savage Frontier* opens this new area with new characters. For 1st- through 8th-level characters, *Gateway* shows much of the evolution which this series of games has undergone. From the quick-start rules book to the wonderfully elaborate and entertaining adventurer's journal (complete with storyline paragraphs which players look up when encountered, to save disk storage space), this new beginning to a new series of Gold Box games is most reminiscent of the *Neverwinter Nights* game played on America Online. IBM ($49.95). Circle Reader Service #11.

TONY LA RUSSA'S ULTIMATE BASEBALL: Here's the behind-the-dugout scoop: *Tony La Russa's Ultimate Baseball* was designed by a member of the original *Earl Weaver Baseball* development team. Players can choose from a variety of menus allowing for varying degrees of difficulty and computer play assistance (giving players the choice of play, managing or both for either or both teams). A solid utilities program allows for the editing of teams, trading and showing statistics. All in all, *Tony La Russa* is a package that touches all the bases. IBM ($49.95). Circle Reader Service #12.

Virgin Games
Irvine, CA

VENGEANCE OF EXCALIBUR: In this sequel to *Spirit of Excalibur*, the vile sorceress Morgan le Fay has been defeated, but the evil she summoned in the form of a great Lord of Demons is no longer bound to her and has been very busy. With the king under enchantment, the Grail and Excalibur stolen and other wrongs to be righted, the player must muster the Knights of the Round Table for a foray into Spain, where Christians are busy feuding with Moslems and mercenaries roam the lands. Players must recruit what help they can through the myriad of towns and cities, plus pick up crucial bits of Moorish magic which will be required in order to defeat the Lord of Demons. IBM ($49.99). Circle #13. CGW


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Inside the Industry

Microprose Files for Initial Public Offering

August 13, 1991 was the date on which **Microprose Software** filed the papers necessary to release an initial public offering of two million shares of common stock. Anticipating a maximum price of $9.00 per share, the optimal capitalization of the public offering becomes $18 million. The prospectus makes clear the necessity for a cash infusion of up to $18 million in order to clear up residual debt related to the poorly received coin-op venture. **Microprose** incurred considerable debt from the the capital expenditures required to launch the coin-op division and the current cash infusion should retire the residual debt, insure continued cash flow/viability and spin off the coin-op division into a separate corporation.

Offering the **Microprose** common stock at $9.00 per share would place the securities at a price-to-earnings ratio (P/E) of 14. This compares favorably to other entertainment software-oriented corporations. Major retailers **Babbages** and **Egghead** trade at a P/E of roughly 16, while **Sierra** trades at a P/E of approximately 13, **Electronic Arts** had a recent P/E of 22 and computer software as a whole was at 23.

Of course, P/E is only one measurement used by investors and does not reflect the situations of companies like **Mediagenic**, **Software Toolworks** and **Spinnaker** that, while publicly held, do not have earnings to plug into the equation. **Mediagenic** was "delisted" as a publicly traded security because NASDAQ believed it had insufficient capital to meet obligations; **Spinnaker** has been carrying a 108% debt load and **Software Toolworks** is weathering two quarters of severe losses.

Astute readers will want to examine the prospectus before making any investment decision based on the **Microprose** IPO or the annual report of any of the other companies listed in this report, but the good news for consumers is that **Microprose** is making long-term plans to remain a major player in the entertainment software industry. The IPO should warrant enough assurance to put to rest those questions consumers have been asking about the surviveability of **Microprose**.

Radio Shack Sponsors Mission Control Exhibit

Radio Shack has created an interactive replica of **NASA**'s Mission Control Center as part of the *Soviet Space* exhibit, on display in Fort Worth, TX until January 1, 1992. *Soviet Space* is a display of artifacts and models from the Soviet space program, ranging from a replica of Sputnik 1 through an actual four-ton telescope and all the way to a space motorcycle and lunar rover. The interactive portion of the display allows visitors to sit at one of twenty stations in the control center, each equipped with a **Tandy** computer operating as part of a **Novell** network. The "guts" of the interactive exhibit is a **Tandy** 4025 LX file server.

Those visitors who want to experience an interactive "replay" of a space mission may be somewhat disappointed, however. The exhibit is designed as a vehicle for allowing visitors to take a trivia quiz based on the *Soviet Space* exhibition which they would have just viewed. **Radio Shack** also provides a *Radio Shack/Soviet Space* certificate as a souvenir for all visitors who take the quiz.



CGW Apologizes for Review/Preview Confusion

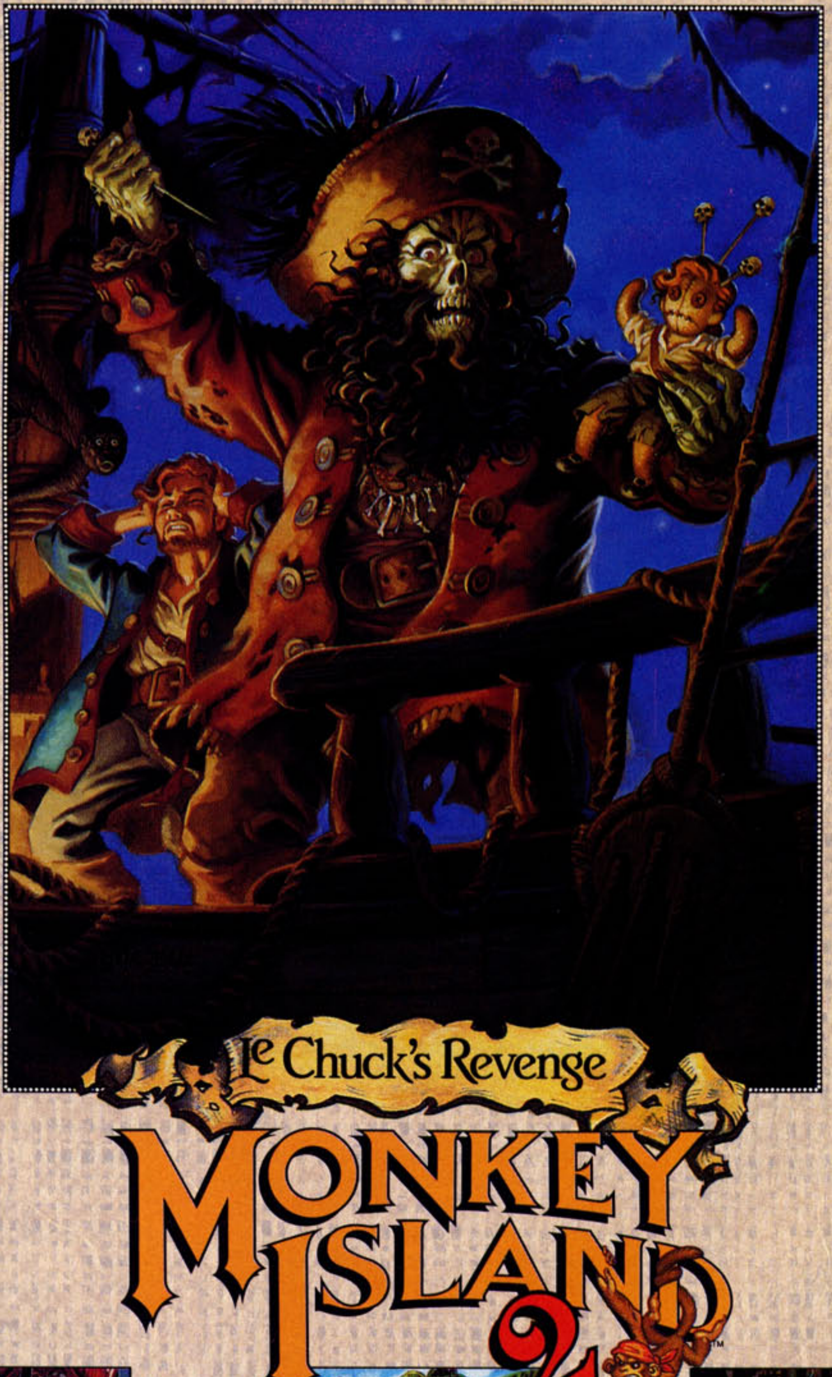
In the September issue of *CGW* (#86), a "Sneak Preview" comparison of *Earl Weaver Baseball II* and *Tony La Russa's Ultimate Baseball* was erroneously printed as a comparative review. *CGW* regrets the confusion, since it is the magazine's policy to print a "Sneak Preview" when working from software that is still in progress and to only label an article as a review if the writer is working from final software. Readers who are interested in either game should be warned that the article was written while the author was working with *extremely* early software (of the crash, burn and die variety) and that more definitive judgments on the software will be printed in the magazine as the programs hit the market. Please see the actual *review* of *Tony La Russa's Ultimate Baseball* in this issue and the upcoming *review* of *Earl Weaver Baseball II* when the game actually hits the shelf. Although the editor keeps appealing to the official scorer that this was a "tough chance," we simply must score this one a big "E." **CGW**

NOBODY LAUGHS WHEN THIS PIRATE PLAYS WITH DOLLS.

It's giving Guybrush a headache.
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The Rumor Bag

by Tony "Da Snitch" Caravello

(continued from #87)

So, as dese guys what were chasin' me in da last issue was gettin' closer, youse truly tries to decide what items of value dis poor rumor guy can barter for da safety of da aforesaid personage's skin. As my cab driver tries to prove dat dere is more dan one way to fly out of McCarron Field, it comes to my remembrance dat I had mentioned da sequel to **Avalon Hill**'s *Legends of the Lost Realm*, but had managed to maintain enough subterfuge to preclude my readers knowing dat da story will take place in da wilderness and dat many of da adventure's activities will involve survival (hunting, finding streams to fill canteens, trapping animals to trade furs or make clothing, and more). Dis, of course, means dat da aforesaid readers are unlikely to be in possession of da knowledge what characters can "walk" freely between da sequel and da original adventure, as well as keep all da items what dey had glommed in da previous adventure.

Maybe dese guys would like to be advised of da latest dope on da **Ad Lib Gold Card**'s "daughterboards" (No, youse truly has *not* sat on a pile of circuitboards!). It seems dat da **Ad Lib** engineers have one-upped dere august personages by developing a series of options what plug into the sound card itself—dese options being a SCSI interface



(da way dat is pronounced sounded almost like a reference to youse truly) for da connection of CD-ROM drives, hard disks or tape back-ups; a Surround Sound card which fits at da top of da card and a PC-based telephone answering system what is only about da size of a "two-bit" piece (quarter) and allows one to connect a standard telephone to da computer. Each of dese particular options cost in da neighborhood of 80 bucks.

I told my cabbie to circle around da Dunes Casino and I would show him a little detour by da golf course what Phil Adam of **Interplay** had told me about. When we came to da dead end, I rolled down my window to ask da proverbial innocent passerby where da exit might be and dis reminded me, at da most inconvenient time, dat **Maxis**' *SimEarth for Windows* will come out in November of 1992 and *SimCity for Windows* in December of 1992 (both with no copy protection).

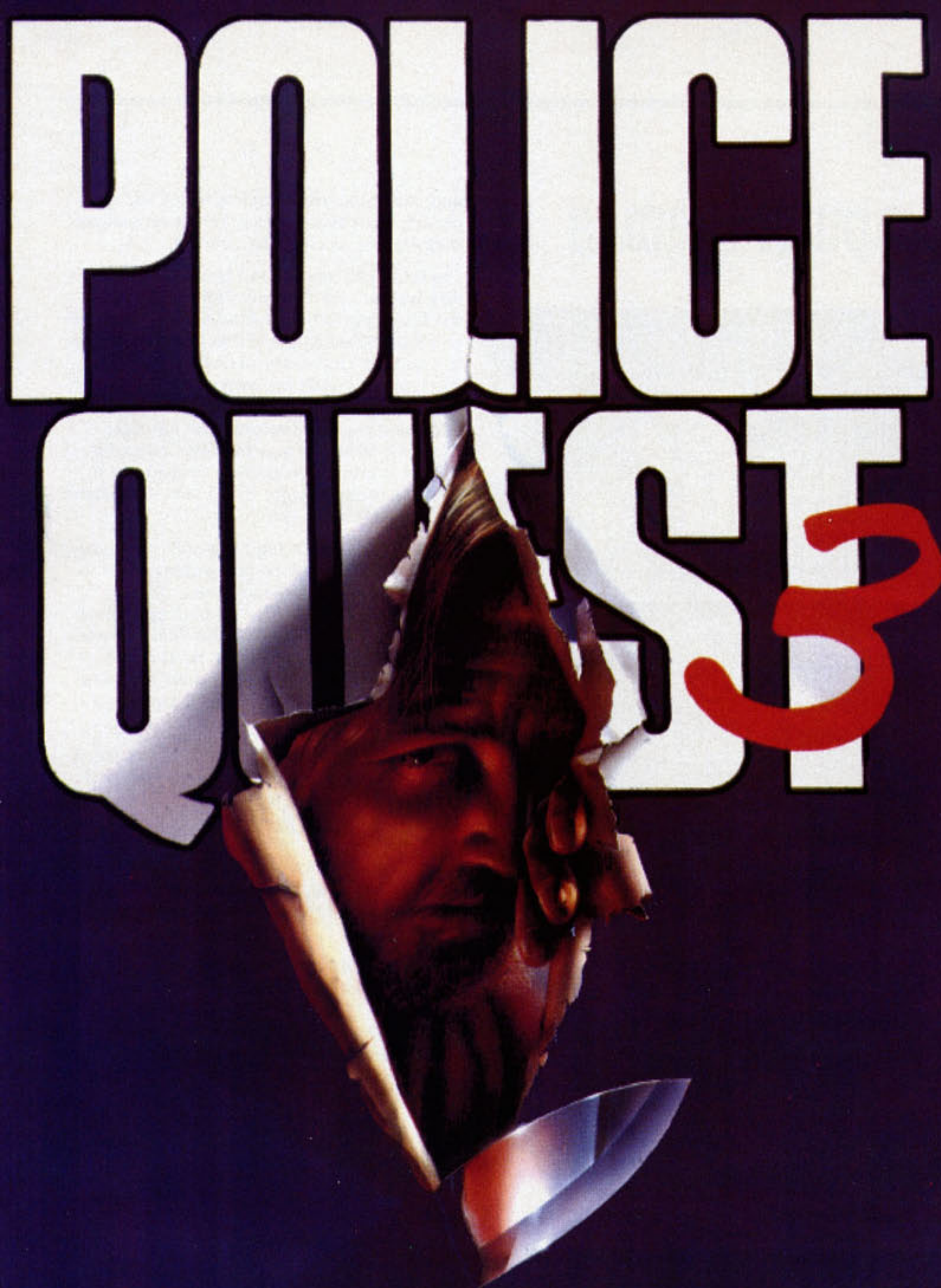
Sose I ask da poor soul where da exit is and da guy says dere is no exit. Da other guys are making something of a grandiose entrance at da other end of da parking lot and my cabbie opts to take me for a fantastic voyage through da fence and across da fairways of da Dunes Country Club. It wasn't exactly Isaac Asimov, but den again, youse truly is not exactly **Centaur Software** (da guys what are releasing *Fantastic Voyage* on da Amiga).

I happen to spot da optimal opportunity to make my escape, sose I dive into da nearest water hazard. Tell ya da truth, youse truly hasn't seen so much water since **Simulations Canada** told me dey was doing three new naval games: *Pacific Storm: The Midway Campaign* (what is Part 2 of da Solomons Campaign game system), *Man of War* (what is dere "Age of Sail" game) and *Sea Power and the State* (what is supposed to be a modern naval game of grand strategic scale). Fortuitously, da company is going to let some of da so-called wargame aficionados dry off with *MBT: Middle East* (what is dere next modern armor game complete with a Persian Gulf database).

Not quite so fortuitously for youse truly, da gangsters what was hired by **RAW Entertainment** were not to be fooled as easily as da computer Japanese opponents in *Silent Service II*. Dey stopped dere gangster-mobile right next to youse truly and dropped a package on da ground. Den dey immediately made dere exit, leaving divots with dere tires. Being of a foolish persuasion and curious demeanor, I could not help but examine the contents of the package, even if this should precipitate da demise of said rumor guy. Da box turned out to contain da European version of *Napoleon I* (see last ish's "Over There" for da particulars) and a note what said **RAW** was going to publish da game over here.

I pulled myself out of da water hazard and began to trudge slowly toward da parking lot when a certain software exec pulled up in his golf cart. He asked me if I had heard about **Legend Entertainment** moving to **Accolade**'s affiliated label program. I told da august personage dat I had not yet derived said information and was most graciously obliged to his kind recitation. I did know, however, dat dose guys were getting ready to spring a big surprise on all of us in 1992, because dey had signed dere first major licensing deal. Dey are going to be publishing a graphic adventure based on *Gateway*, da Frederick Pohl science fiction universe. Sose, da software exec grabs his cellular phone, yells at his creative director because dey didn't get dat license and runs over youse truly with da golf cart. I tell ya', some mornings it don't pay to get out of da water hazard. CGW

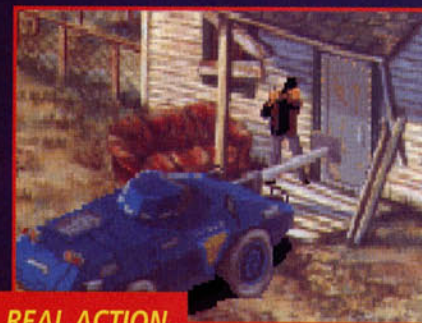
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A History of Computer Games



Alan Kotok, Steve Russell and Shag Graetz reminisce over Spacewar! *on the Boston Computer Museum's DEC PDP-1.*

In a very real sense, it all began with a model railroad set. Students at M.I.T. were fascinated with all the ways various switches could be integrated into their master layout in order to enhance the quality of operations. Later, when they finally got their chance to interface directly with the TX-O and DEC PDP-1 computers, their previous work in binary (model railroad switching) put them in good stead to make maximum use of the computers.

B.C.G.W.

Steve "Slug" Russell was one of the members of M.I.T.'s "Hi-Tech Model Railroad Club." A wizard at LISP programming, he was working in the summer of 1961 at Harvard's Littauer Statistical Laboratory when he and some friends hit upon an idea for bringing E.E. "Doc" Smith's pulp science fiction novels (*The Lensman* novels and *Skylark*) to the computer. In 1962, Steve developed the program on the PDP-1 (the very console that rests in Boston's Computer Museum at the present day) at M.I.T.

In *Spacewar* (as the program came to be known), two "B" movie-style computerized rocket ships (one shaped like a fat cigar and the other as a long slender tube) could fly across a computer-generated section of space. Players could flick toggle switches in order to make the ships change direction, in much the same way coin-op and Atari game machine players were later to control the ships in *Asteroids*' zero-gravity environment. Each ship had an inventory of 31 torpedoes. So, as they flew across the computerized sector, a player could fire a dot from his rocket's nose in the direction of the other ship. If the dot managed to actually intersect the shape of the other ship, the program ruled that the torpedo had successfully hit its target and the other ship "exploded." Actually, the other ship disappeared from the screen and was replaced by a mad scramble of dots which represented the debris of the destroyed ship.

Naturally, the community of hackers could not be satisfied with the status-quo of any program, no matter how entertaining or functional. So, changes were inevitable. One friend, Peter Samson, was not satisfied with the random dot starmap which Russell had originally placed in the game. He took a celestial atlas and managed to program our actual galaxy, all the way down to fifth magnitude stars. Another student added a gravity option and another added a hyperspace escape option, complete with a nifty stress signature to show where the ship left the system.

Even Slug made some changes. Knowing that real torpedoes do not have a 100% success rate, Slug decided to give the space torpedoes a certain failure rate and to add randomality to their respective trajectories and time of detonation. His friends hated the new version because they wanted the same kind of dependability they were getting from their experiences at computer programming. Slug changed things back and, before anyone realized what had happened, *Spacewar!* was a fixture on college mainframes all over the country.

In fact, *Spacewar!* had become such a fixture by the mid-'60s that Nolan Bushnell, the founding father of Atari Corporation, became addicted to the game while he was attending the University of Utah. By 1970, Bushnell had built his own machine (using 185 integrated circuits) to connect to a television set and perform one function. That one function was to play *Computer Space*, a coin-op variant of *Spacewar!* in which a rocket fought flying saucers instead of another rocket ship.

But *Spacewar!* wasn't the only predecessor of commercialized computer games to appear on college mainframes. Some anonymous hacker started playing around with a *Star Trek* game in the '60s. No one knows who hacked the first such game (and he would probably be sued if anyone did), but the games were in college computers nationwide by 1969.

The game itself was not very elaborate. It had grid maps to allow starships to travel from point to point, used ASCII letters to identify the ships, provided shield information in numerical percentages and allowed for both faster-than-light and sub-lightspeed travel. The Klingons were fast and numerous and the Romulans had cloaking devices.

If the game sounds familiar, that is because almost every home computer system had some type of *Trek* game available for it by the mid-'70s and there was an IBM game based on this program in the early '80s. The IBM game was called *Star Fleet I*. It was published by Interstel (originally Cygnus) and featured Krellans in place of Klingons and Zaldrons in place of Romulans. The game was basically the same, though.

Also around the turn of the decade (1970), a mathematician named John Horton Conway began to experiment with a game wherein the player would design rules for how cell structures could be put together. Then, they would allow the program to run and watch all the permutations that their life-forms went through, based on following their rules sets. The game was known as *Life*. It was a crude version of what we now call cellular automata and might have been the first "software toy" (in the sense of a *SimCity* or *SimEarth*, where playing is more important than winning). The program received considerable attention in *Scientific American* and spawned considerable discussion about the possibility of coding artificial life.

About the same time, a Stanford hacker named Donald Woods was nosing about the Xerox research computer and found a prototype computer game. This game's parser used two-word commands to communicate with the game and featured a Tolkienesque milieu. The name of the game was *Adventure* and the name of its designer was Will Crowther. Not only did *Adventure* introduce a number of people to


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the genre of computer adventure games, but it became a commercial game in its own right. It not only became the packaged game *Colossal Cave*, but it inspired some classic adventure series.

One such inspirational event was when Ken Williams brought home a terminal which only printed hardcopy. Roberta Williams played the original *Adventure* on that terminal, anxiously waiting for the mainframe to print out the results of her last command, and credits the playing experience as providing part of the inspiration for her games. In addition, a group of M.I.T. hackers (including Marc Blanc, Joel Berez and others) began to create a text adventure called *Zork* which owed its original inspiration to *Adventure* and went its mentor one better by creating a parser that could understand complete sentences. *Zork* was not actually available on a home computer until 1981 when the hackers' new company, Infocom, released the game for the Apple II.

INFOCOM

By the mid-seventies, gamers were popping up nearly anywhere there were computers. In 1975, boardgame publisher SPI used their in-house business computer to test the economic model for their upcoming monster game, *War in the East*. *War in the East* was not a computer game, but it anticipated the origin of computer wargames on home computers by functioning as something of a computer assistance program. Indeed, by 1979, SPI was advertising for independent submissions of such computer assistance programs to help players handle the prodigious bookkeeping necessary to play the company's massive and complex boardgames.

At CalTech in 1976, Walter Bright started using FORTRAN-10 to write the original *Empire*, a relatively simple wargame dealing with conquering the surface territory of entire planets. Later, Mark Baldwin updated the program (writing it in C) and added some features like destroyer escorts and a mouse-driven interface. Then it was published by Interstel as a best-selling game for personal computers.

During the same period, Chris Crawford was teaching physics at a small community college in Nebraska. In 1976, he took some maps from Avalon Hill's *Panzer Leader*, some lead miniatures of armored vehicles and some of his own FORTRAN code and created a tank game for the school's IBM 1130. With typical Crawford humor, he called the game *Wargy* and unveiled it at a wargame convention during the winter months. That program also spawned a commercial version, Avalon Hill's *Tanktics* — a computer-assisted boardgame.

AH microcomputer games®

So, by 1979 and 1980, a revolution was about to begin. Jon Freeman and Automated Simulations (eventually to become Epyx) published *Starship: Orion* in '79 and began work on *The Temple of Apshai*, a role-playing game in the tradition of the *Dungeons & Dragons* pen-and-paper game. The same year saw Richard Garriott (soon to become Lord British) sell zip-lock packages of *Akalabeth*, a predecessor to the *Ultima* series and Scott Adams unleash a torrent of text adventures on the market. In fact, *Akalabeth* sold so well that Garriott started writing the initial *Ultima* in the fall of 1979, while still a freshman at the University of Texas.

Other companies, like now-defunct Quality Software, produced games like *Beneath Apple Manor*, a low-resolution maze game in which players looked for a golden apple hidden in the basement of an old mansion, and Joel Billings, founder of Strategic Simulations, Inc., tried to sell the idea for a computer wargame to both Avalon Hill and newly-founded Automated Simulations.

Ironically, Billings was to found his own company, publish *Computer Bismarck* and become involved with Avalon Hill in a legal dispute over how close *Computer Bismarck* actually was to Avalon Hill's own *Bismarck* boardgame. Nevertheless, Billings' venture must have struck a nerve, since Avalon Hill was publishing a full line of computer games by 1980.

Another interesting fact about *Computer Bismarck* is that Joel borrowed a Northstar computer from Amdahl Corporation (where he worked) and expected that he and John Lyon would program the game on the Northstar. At that time, Trip Hawkins (who was then a marketing executive at Apple) convinced Joel and John that the Apple II had better graphics potential and would reach more customers than the Northstar could. The irony is that Trip Hawkins is now the chairman of the board of Electronic Arts and Electronic Arts both owns interest in and distributes the products of SSI.

SSI

By 1980, when Billings and Lyon were developing *Computer Bismarck*, Ken and Roberta Williams laid the foundations for a new genre, the graphic adventure game. The first hi-res adventure was *Mystery House*. Roberta was inspired by Agatha Christie's *Ten Little Indians* (as well as the game *Clue*) and decided to bring the experience to the computer. Ken had purchased a graphics tablet that allowed Roberta to draw images on the pad and save them as graphic files. Then, after Roberta



Richard Garriott, a.k.a. Lord British.

drew the pictures, Ken figured out how to pack seventy images per diskette (using a draw-and-fill technique). The game sold well enough that Ken and Roberta parlayed the profits into three more successful games: *The Wizard and the Princess*, *Mission: Asteroid* and *Time Zone*.

While On-Line Systems (Sierra's original name) was just beginning to take off, another major player was establishing itself. Attorney Doug Carlston had become burned out on practicing law and was becoming enamored with his TRS-80 computer. He designed a space opera-style game called *Galactic Saga* in which many of the locations had African names (Afrikaans, Swahili, etc.). There was a group of merchants in the game known as the "Broederbond," Afrikaans for "association of brothers." When Doug's brother Gary started successfully hawking the game from computer store to computer store, they immediately thought of emphasizing the family aspect of the business.

Brøderbund Software®

That's when Broderbund got its start. However, since Doug had spent some time in South Africa (in fact, was once ousted because he dared to teach at an integrated school in Botswana); there was actually a group known in South Africa as the "broederbond" (who were *not* especially

good guys) and Doug and Gary felt that using the Afrikaans spelling would have implied support for the repressive South African regime, they adopted the variant spelling "Broderbund," which is still in use.

By the summer of 1980, a familiar name in wargaming circles had entered the microcomputer arena. It was at the Origins National Game Convention held in Chester, Pennsylvania that the **Avalon Hill Game Company** (publishers of boardgame-style wargames since 1958) unveiled its initial five titles: *B-1 Nuclear Bomber*, *Midway Campaign*, *North Atlantic Convoy Raiders*, *Nukewar* and *Planet Miners*.

Although *Zork* did not arrive on the Apple II until 1981, its birth was more properly part of the '70s. In the mid-1970s, **Infocom**'s eventual braintrust (Marc Blank, Joel Berez and Dave Lebling) met at M.I.T.'s Laboratory of Computer Science. Inspired by the original *Adventure*, Blank and Lebling designed a mainframe adventure game.

It wasn't just *any* adventure game, however. The goal of the game's designers was to allow the computer to understand more typical English sentences than the simplistic and often infuriating two-word parser of previous adventure games. So, Marc Blank applied his artificial intelligence work and created ZIL (Zork Interactive Language), a "parser" which allowed the program to find associations between sentences and, hence, better understand what the player wanted to do.

Students at M.I.T. responded so favorably to the mainframe version of *Zork* that a professor at the institute, Al Vezza, encouraged the group to form a corporation. On June 22, 1979, the professor and his star pupils (Berez, Blank and Lebling) formed **Infocom** for the express purpose of developing *Zork* for the personal computer market. Its success was followed by *Starcross* (a science fiction adventure which came packaged in its own flying saucer) and two *Zork* sequels (*Zork II* and *Zork III*).

At first, the company seemed very focused on producing quality interactive fiction and designers like Stu Galley, Steve Meretzky and Brian Moriarty were added to the cast. Games like *Deadline*, *Planetfall*, *Suspended* and *Witness* followed (1983). Yet, Blank, Berez and Vezza had a hidden agenda that was already beginning to foreshadow changes at the company. Their goal was to move from games to productivity tools.

Actually, many people do not realize that the founders of Infocom were not entirely interested in computer games. Most did not even like personal computers. Instead, they were business-oriented and hoped to "make it big" like their friends and classmates who founded **Lotus Development**. The idea of producing a business-oriented database became an obsession, as did the later move to luxury accommodations in Cambridge. Vezza was determined to out-Lotus **Lotus**.

What this obsession did to **Infocom** in the latter part of the '80s can be read later in this article.

SIR-TECH

In 1981, another entertainment software company appeared, almost by magic. When Robert Woodhead was hired fresh out of Cornell by a New York- and Canadian-based concrete business, he was *not* hired to write computer games. He was hired to computerize the accounting system of Fred Sirotek's construction company. He proved himself to be such a hot programmer that he was able to convince Fred to underwrite the publication of a fantasy role-playing game to be designed by himself and his friend, Andrew Greenberg. In 1981, **Sir-Tech Software** (a pun on the Sirotek family name, the medieval era that their flagship products are based in and an abbreviation for technology) published *Wizardry: Proving Grounds of the Mad Overlord*. The publication was a tremendous success and the *Wizardry* series remains, along with the *Ultima* series, one of the benchmarks of computer role-playing. (Both series are ready to birth their seventh installments at the time of this writing.)

A.C.G.W.

By the Winter of 1981, computer gaming had become a full-fledged hobby when no less than three magazines were launched in order to provide information for the burgeoning industry: *Softline* magazine (associated with both *Softalk* magazine and On-Line Systems—now Sierra—and partially funded with Margot Tommervik's winnings from an appearance on the Password television show), *Electronic Games and Computer Entertainment* (published by Reese Publications out of New York City) and *Computer Gaming World* (founded by Russell Sipe and funded by a closely held group of visionary shareholders). Eventually, *Softline* was to die along with its parent magazine *Softalk* and *Electronic Games* (which emphasized the action games associated with video cartridge systems as much as it emphasized computer games) was to suffer from the cartridge industry's decline. *Computer Gaming World* is now the world's oldest computer game magazine and has managed to weather the video game market crash (when Atari VCS owners became bored with the capabilities of their machines because all the games had become the same) because Sipe took a more conservative approach that combined a focus on the floppy disk-based computer game market with its more adult (and stable) consumer base and cautious distribution aimed at strategic outlets. Steven Levy (author of the best-selling *Hackers*) once described *CGW* as a "staid publication" that "eschews flash for substance." Indeed, it is probably this serious approach to a hobby that many would deem frivolous that accounts for *Computer Gaming World*'s survival when more "colorful" publications were dying.

Speaking of colorful, unbeknownst to *CGW* staffers, a significant encounter took place in the summer of 1982 that was to cause considerable waves in the entertainment software industry. Neither "Wild Bill" Stealey, a strategic planner for a major Baltimore corporation, nor Sid Meier, a computer systems analyst for the same firm, knew of each other. However, during a break in a company meeting at the (then) MGM Grand Hotel in Las Vegas, the two met over a coin-op game called "Red Baron" (no relation to the game of the same name from **Sierra/Dynamix**).

The coin-op game used wire-framed graphics to depict World War I aircraft and the player sat in a console cabinet as he tried to shoot down the enemy planes with his unlimited ammunition supply. As a former fighter pilot, "Wild Bill" was challenging all comers.

Imagine Major Bill's (now, Lt. Col. Bill's) chagrin when a mere programmer came along and beat the fighter veteran's high scores. Imagine his interest when Sid Meier, said programmer, began to explain the game's rudimentary programming and showed how to predict the simple moves used regularly by the game's enemy pilots. Then Sid boldly said that he could design a better game in *one week* on his home computer.

Anyone who knows Bill Stealey knows that he is not the kind of person to let a challenge go unanswered. So Bill said he could sell the game if Sid could write it. As it turns out, it took two months for Sid to come up with a game he was happy with, but by the time Bill completed his *first* sales call, *Hellcat Ace* was a success. The first store Bill stopped at purchased 50 copies. Becoming a full-fledged publisher was inevitable.

When the company started, toward the end of 1982, it was not originally slated to be named MicroProse. One idea was to call it "Smugger's Software," in deference to Sid as an oblique reference to a S.M.U.G. (Sid Meier's Users Group). They finally agreed on MicroProse with the intent of making a double pun. The company was to publish the work of micro-professionals and their art was to be comparable to excellent prose.

In 1987, **MicroProse** agreed to change its name to avoid legal difficulties with **Micro-Pro International**, the publisher of *Wordstar*. They were given two years to change the name and, just before the name change was required, **MicroPro** identified themselves more closely with their flagship product, changing their name to **Wordstar International**. By the turn of the decade, MicroProse would claim two other labels: **Microplay** and **Medalist**.

The 1982 encounter between Sid Meier and Bill Stealey spawned MicroProse, but the 1982 San Francisco Applefest was to birth an even larger West Coast publisher. Originally slated to be "Amazing Software,"

this company took on the more appropriate appellation Electronic Arts. Electronic Arts didn't even have a booth at the 1982 Applefest, but they put on the best "show." A special bus took industry professionals to the Stanford Court Hotel where "The Woz" (then an EA board member) was holding court as the main speaker, a rock band was thundering forth with dance music and coin-op arcade machines had been rigged for unlimited play.

Russell Sipe, as both editor and publisher of *CGW*, and Al and Margot Tommervick, founders of *Softalk* and *Softline*, shared a taxi to the party (talk about friendly competition) and originally thought that the social event was bigger than it was. It seems the brain trust of computer game journalism had to circumvent a Nob Hill rally/parade which was staged in preparation for the Cal-Stanford game to be held on the following afternoon. Regardless, the party created an image that was consistent with the vision which was to drive Electronic Arts: success, entertainment and technology.

Trip Hawkins, former Director of Marketing for Apple's LISA, had a vision of gathering artists together and following a new paradigm in developing entertainment software. Originally, the paradigm seemed more based on the recording industry (even the album-jacketed products offered this subliminal suggestion) where artists worked on their own creative agendas, signed contracts for specific products and received technological and marketing assistance from the "studio." The vision was underscored in one of the company's earliest advertisements. The banner headline was "We See Farther." The first line of copy was "Software Artists?" In one image-making advertisement, Trip Hawkins molded his vision around computer game designers as performing artists.

The Electronic Arts mystique convinced many of the early professionals: Dan Bunten (*M.U.L.E.* and *Seven Cities of Gold*), Bill Budge (*Pinball Construction Set*), Jon Freeman, Anne Westfall and Paul Reiche III (*Archon* and *Murder on the Zinderneuf*) and Chris Crawford (*Patton vs. Rommel*), as well as many of the early developers who became successful publishers in their own rights (Dynamix, Interplay and Lucasfilm).

Later, Trip Hawkins unveiled the metaphor that underscores the studio era which has pervaded not only Electronic Arts, but the entire entertainment software industry to the present day. Hawkins believed (and believes) that the entertainment software industry is "The New Hollywood." Even as film studios become enamored with technology (special effects, new sound techniques and film sizes), targets (positioning, packaging and distributing), talent (box office recognition), trends (fads and topicality) and themes (story), software publishers must be concerned with hardware trends and capability, marketing, artistic growth, consumer interest and playability/credibility. The tensions between art and commercial success are just as prevalent in the computer game industry as they are in film, recording or broadcast media.

Today, the software publishers that are having the most impact on the market are those publishers that understand themselves as entertainment studios and perceive the various talents they have assembled around projects as part of a creative team. As of this writing, "The New Hollywood" is almost as literal as it is figurative in that many talents in screenwriting, animation, musical composition and even acting have moved into the computer game industry.

Crash Go the Carts

In 1983, there were 25 million videogame machines in the United States (mostly Atari VCS). In early 1983, the coin-op arcade market experienced an inexplicable slump. In three short months, the "coin eaters" went on a consumer-enforced diet that cut the market by almost 90%. By 1984, even the home videogame market was dead.

Before the crash, however, **Atari** made a grant that was to have significant impact on computer game history. At the height of **Atari**'s power, the company underwrote the founding of **Lucasfilm Games**. Although the grant was presented in 1982, it took two years of development for the new company to bring its first two products, *Rescue on Fractalus* and *Ballblazer*, to the point of release.

Peter Langston was very well known in the computer division of Lucasfilm as their UNIX guru and he instantly became head of the games group. He was the logical choice to head the new games division, since he believed in the future of computer entertainment, but he was not the kind of market-driven executive that was likely to hurry the products to market. In fact, the entire division was more technologically oriented than game-oriented because they saw all the game work as being primarily research and development. By 1984, however, profitability had become a primary concern and the company hired Steve Arnold, then an Atari V.P., to help the company learn to pull its own weight.

Unfortunately, just as *Ballblazer* and *Rescue on Fractalus* were nearing release as cartridge games, Sam Tramiel purchased Atari. Since Atari had planned to publish the games, these events put Lucasfilm's marketing plans on hold. Home cartridge systems and cartridge games were in the bargain bins for next to nothing, so there did not seem to be any compelling reason to publish the games.

Indeed, the computer game industry was caught in the confusion of the cartridge crash. As a smaller industry, though, it did not have as far to fall as **Colecovision**, **Intellivision** and **Atari VCS** manufacturers and publishers. The major disk-based software publishers managed to survive, but many smaller players who simply published computer versions of cartridge games disappeared.

Lucasfilm Games managed to translate *Ballblazer* and *Rescue on Fractalus* to the Atari 400/800 for 1985 release from **Epyx**. This gave programmers like David Fox the time to accomplish some of the most intricate finishing touches ever in a computer game. He videotaped transition screens from *Fractalus* in order to correct a flicker he had detected in the game by viewing it frame-by-frame.

Today, Lucasfilm Games is one of the legacies of the early era of home cartridge games. In 1984, a group of ex-cartridge designers decided to form another, **Accolade**. Bob Whitehead and Alan Miller were unhappy with the direction **Activision** had been going since it went public on June 14, 1983. Alan and Bob were quickly tiring of the corporate games and decided to form their own company, a company founded by programmers *for* programmers.

When the company was officially formed in December of 1984, Al Miller wanted to make sure that the name of the new company would come before Activision whenever the two companies were listed in alphabetical order. So he searched the dictionary to find a name which would precede Activision. They became enamored with **Accolade** because the idea of applause and approval appealed to their artistic natures. The truth was, neither Whitehead nor Miller wanted to be president of the company. So they began a search for a suitable president with high-tech experience.

They initially offered the presidency to Tom Lopez, an Activision veteran who eventually founded the **Microsoft** CD-ROM division and, after he declined the position, to Allen Epstein, an ex-**Activision** employee who was working in venture capital. Epstein *is* the current president and CEO, but he originally passed on taking the position, as well. So **Accolade**'s first president came from one of Nolan Bushnell's **Catalyst** companies.

Tom Frisina stepped directly from his responsibilities at a company developing robots for consumers to the management of Accolade's business affairs. It seemed like a natural for a robotics president to run a company founded by the author of Activision's *Robot Tank* cartridge, but differences in management style between the conservative founders of the company and an executive linked with Bushnell's "U.S. Government" approach to problem-solving—

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throw money at the problem—seemed inevitable.

Actual operations began in February of 1985 with the C-64 as the company's target machine. The original strategy was to form an internal product development team, based on the work of Bob, Al and Mike Lorenzen (another Activision veteran who decided to leave the corporate rat race). Miller decided to do *Law of the West*, a point-of-view horse opera in which the player was the lawman described in the title; Whitehead elected to program *Hardball*, the action-oriented baseball game that became a mega-hit and eventually became a movie star (the game was the first image seen in *The Princess Bride*); and Lorenzen determined to develop *Psi-5 Trading Company*, a space trading game.

Frisina did not believe that internal development alone could generate the kind of revenue a new, fledgling company would need to survive, however. So, he began a search for outside developers. Through Sydney Development Company, a Canadian developer of mainframe products, he not only discovered two game designers based in Ottawa, Rick Banks and Michael Bate, but he was also introduced to an 18-year-old prodigy (no relation to IBM or Sears) from British Columbia named Don Mattrick. Banks and Bate had programmed *B.C.'s Quest for Tires* for another company and wanted to do their own titles. As **Artech**, a development company sub-contracted to **Accolade**, they produced *Dambusters*, *Fight Night* and *Desert Fox* during Accolade's first year. The first two did well, but *Desert Fox* was not released until the company formed the **Vantage** bargain line of software during a period of retail shelf wars. Mattrick was initially hired to program the Apple conversions of *Dambusters* and *Fight Night*.

Interestingly enough, both **Artech** and Mattrick's company **Distinctive Software** have gone on to exclusive relationships with other publishers. **Artech** develops solely for **Three-Sixty Pacific** and **Distinctive Software** was recently purchased by **Electronic Arts**, with Mattrick becoming **EA**'s youngest vice-president. Before the out-of-house developers left, however, each was to contribute significant hits to **Accolade**'s line: **Artech**'s *Ace of Aces* and **Distinctive**'s *Test Drive*. The latter was conceived after Mattrick purchased his first Lotus Esprit and decided that "everyone" would like to drive a hot car.

In 1985, Accolade had revenue totaling $1.5 million, but this expanded to $5 million in 1986 as hits like *Ace of Aces*, *Mean 18* and *Test Drive* pointed the way to a successful future. 1985 also brought a new player on the scene from the other side of the arcade crash, the coin-op connection. **Data East** had been functioning as a coin-op company since 1979. In 1985, the company formed its consumer division to convert the coin-op hits into cartridge and home-computer games.

"Cartridge games?" the weary reader asks. "I thought they were dead in 1984." Conventional wisdom certainly would have said as much, but conventional wisdom is rarely *true* wisdom. When **Nintendo** showed up on the scene at the January CES in 1985, Roger Buoy of **Mindscape** is reputed to have said, "Hasn't anyone told them that the videogame industry is dead?" Nevertheless, **Nintendo** was to prove that a gigantic phoenix can rise from industrial ashes if it controls the vertical (production) and the horizontal (marketing). So **Data East** was one of the early licensees to see the opportunity in video games and exploit that opportunity. The company hedged their bet, however, with floppy-based products.

Infocomplications

1986 also brought the red ink of *Cornerstone*, the only **Infocom** product without a plot. *Cornerstone* was a database that rocked the corporate structure of **Infocom** rather than bringing the desired stability. Instead, it brought trouble.

Of course, it didn't look like trouble, at first. It looked (as it does in many corporate acquisitions) like a "White Knight" riding to the rescue. James Levy, (then) CEO of (then) **Activision**, was a true fan of **Infocom** games. He perceived the corporate weakness brought about by *Cornerstone* as an opportunity to acquire a software jewel and began putting the deal in motion that was finalized on Feb. 19, 1986.

Activision purchased Infocom for $7.5 million (although much of the settlement price was in Activision common stock and may have had a different value by the final payment on June 13, 1986). This meant that Marc Blanc lost his bet with *Cornerstone* co-author Brian "Spike" Berkowitz that Infocom stock would top $20.00 per share by '87 or Blanc would buy Spike dinner in Paris. Infocom sold for *much* less than $20 per share and the last *CGW* heard, the bet had still not been paid off and Blanc was trying to change the venue to Tokyo.

The acquisition was not received well at Infocom. The company newsletter, once known as the *New Zork Times* but soon to be known as *The Status Line*, joked about graphics in interactive fiction stories and better parsers in *Little Computer People* (one of Activision's big hits of the era), but printed one phrase that, in retrospect, offers a melancholic ring: "We'll still be the Infocom you know and love." At first, it looked like this might be true. From 1985's low of three interactive fiction titles, 1986 saw five *new* titles.

The humor at Infocom never really stopped until the latter days. When the *New York Times* complained about their newsletter's original name (*New Zork Times*), they ran a contest to rename the publication and first prize was a subscription to the *New York Times*. Their in-house (great underground?) paper *InfoDope* joked that Levy wanted them to do simulations, cynically suggesting titles like *Tugboat Simulator* and *Empire State Elevator Operator*. Less-than-kind remarks accused Activision superstar Steve Cartwright (designer of *Alien* and *Ghostbusters*) of being able to turn out action games in an afternoon.

Yet harmless jokes about Levy turned to cynical anger at Levy's successor, Bruce Davis. Insiders claim Activision's new CEO had been against the Infocom buy-out from the start and that he immediately raised the ante on some anticipated losses that were to have been indemnified by Infocom shareholders from $300,000 to $900,000 with no accounting. The shareholders filed a preemptive suit and managed to stave off the "required" payment.

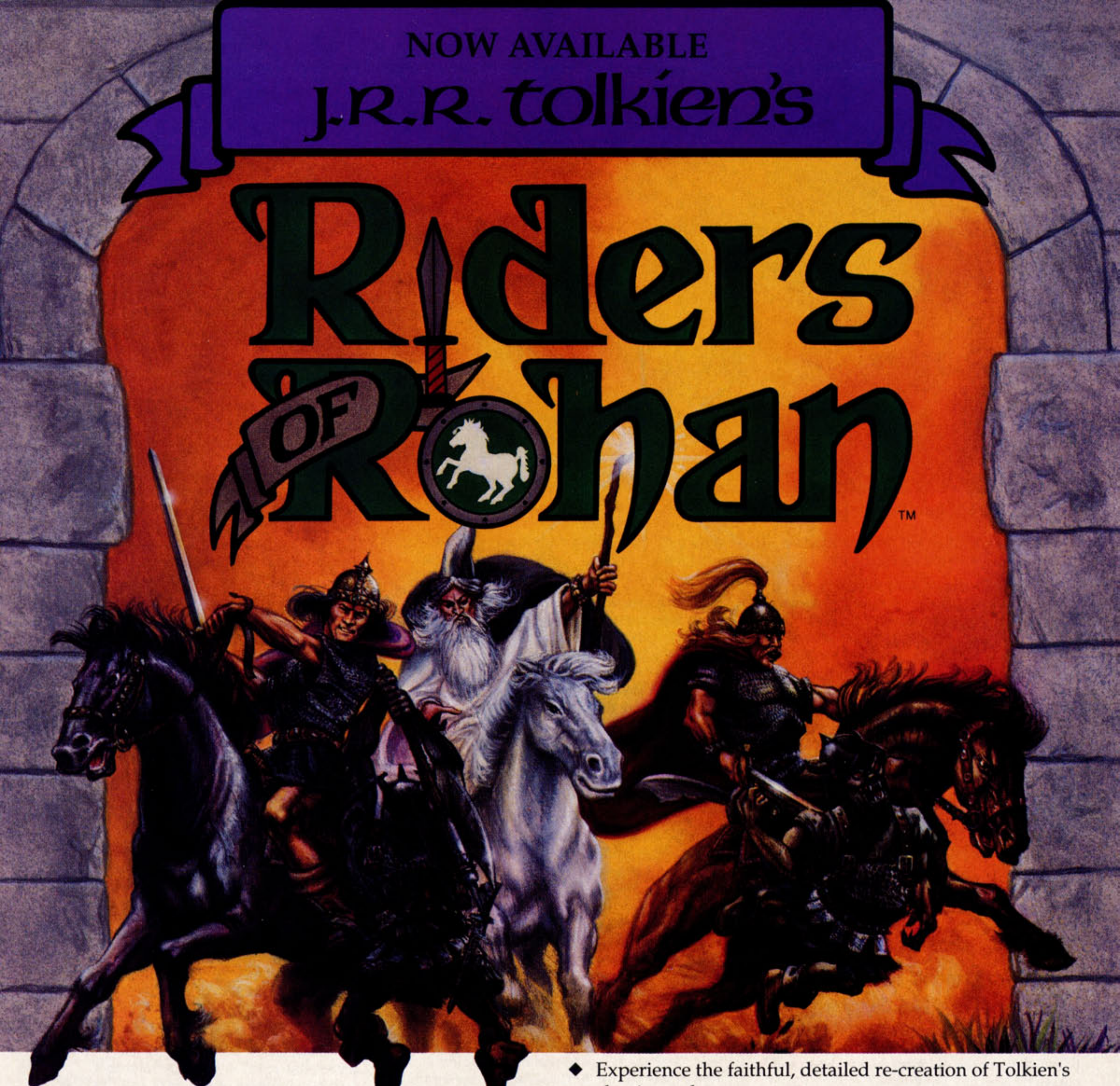
Morale began to deteriorate, with Infocom personnel feeling like Davis was foisting off all the programs which should have been still-born in development onto Infocom. They detested *Infocomics*, the **Tom Snyder Productions** attempt to use the computer as an interactive comic book (the idea was to produce $12 products in a continuing series that would appeal to the comics crowd), never believing in the concept but noting that all the development costs were being charged against their budget. A brutal (underground) memo urged Infocommies to join the "Bruce Youth" movement, casting the CEO in a classic bad guy role as he requested Infocom personnel to "turn in" their fellow employees whenever said Infocommies would murmur "a discouraging word."

Activision gradually dismantled Infocom. First, sales and manufacturing were absorbed. This seemed logical, but by the time the great *Infocomics* experiment failed in 1988, public relations and customer support were also absorbed. In 1989, development was moved to the West Coast, but those who built the Great Underground Empire elected not to move or were not invited to do so. As *Arthur*, *BattleTech*, *Journey* and *Shogun* reached the market, Infocom was no longer a distinctive publisher, it was only a label.

At approximately the same time as Infocom was fading into the woodwork, **Spectrum HoloByte** was ready to spring upon an unsuspecting **Sphere**. That is, the existing company called **Spectrum HoloByte** merged with **Nexa Corporation** to create **Sphere**. The latter, in turn, was purchased by a division of Robert Maxwell's multi-national publishing empire. **Sphere**'s publication of *Tetris* not only captured the imagination of the ordinary computer consumer, but ensnared the attention of the general media, as well.

Commitment to the Amiga?

By the mid-1980s, **Electronic Arts** had already staked out territory as one of the most prolific domestic publishers of Commodore Amiga software. As Vice-President Bing Gordon once observed, the company "likes neat stuff" and can be "seduced by



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Gary Carlston and Robert Garriott at Origin's graduation—Summer CES, 1989.

new hardware." EA called their Amiga line a "Commitment to the Amiga."

Early on, **Electronic Arts** even bundled a cute little digitized program called *Kaleidoscope* and a slide show, depicting their product line, with the Amiga systems disks for the Amiga 1000. The company originally envisioned the Amiga as a Macintosh killer. The reason was simple. Amigas were available at a much more affordable price than the steep entry price for Macs. As it worked out, however, Macs ended up in businesses while Amigas ended up in homes and graphics houses.

As late as June of 1987, Bing Gordon was touting **EA**'s goal as the publication of at least one Amiga product per month and "...hoping it will be the premier home computer." Before such an event could occur, however, the price wars on MS-DOS machines drove the IBM compatible to its current apex as the dominant home computer.

Years of Movement and Litigation

1987 was also a year of significant corporate and legal events. **Broderbund** was particularly active on these fronts. First, the company announced, then withdrew their initial public offering after observing **Activision**'s weak profits and stock performance. In addition, **Origin** moved from **Electronic Arts Distribution** to **Broderbund** as their distributor. At the same time, **Broderbund** settled a "look and feel" suit with **Kyocera Unison** over similarities between the former's *Print Shop* and the latter's *PrintMaster* when **Kyocera** made a substantial payment to **Broderbund**.

Data East won a U.S. District Court judgment against **Epyx** over similarities between the former's *Karate Champ* game and the latter's *World Karate Championship*. The 1987 ruling was overturned by an appeals court on November 30, 1988. **SSI** filed a breach of contract suit against the *Questron* development team for producing *Legacy of the Ancients* for **Electronic Arts** prior to fulfilling their agreement to produce *Questron II* for **SSI**. This dispute was settled out of court.

At the same time as the previous litigations were underway, **MicroProse** was settling their famous name imbroglio with **MicroPro International** and appealing the placement of *F-15 Strike Eagle*, *Gunship* and *Silent Service* on (then) West Germany's *Youth Dangerous Publications List*. After a vigorous appeal, the West German National Examination Board allowed the products to be sold and modified their initial finding that the products were "...morally corruptive and coarsening for the young user."

1988 was also an important year of movement in the computer game industry. **Interplay** and **Lucasfilm** left the fold as **EA** developers in order to become "Affiliated Publishers" at **Activision**. **Dynamix** became predominantly an **Activision** developer and later (actually in 1989), became an affiliated publisher, as well. After then vice-president of Activision Dick Lehrberg had added **New World Computing** and **Microillusions** to a seeming amazing line-up of affiliates, the company inexplicably softened on the idea and eventually lost all of them. It was the first of many mind changes by **Activision** management. They changed their minds on Hypercard products, Apple IIGS products and even their own name (changing the name to **Mediagenic** in order to capture some high-tech sizzle among investors who remembered **Activision** all too well from the days of the cartridge crash).

Origin announced that it had adopted a brand new logo and corporate strategy by the latter portion of the summer. By June of 1988, **EA** was back on track by signing **Strategic Simulations, Inc.** as their newest "Affiliated Label." Indeed, it was not to be long (1989) before **Lucasfilm** elected to return to **EA Distribution** and **New World** was to join the **EA** team for the first time. Another **EA** affiliate, **Software Toolworks**, began a round of expansions by acquiring **Intellicreations** and setting the stage for future acquisitions such as that of action game publisher **Mindscape** (approved by both boards of directors in March of 1990).

The Japanese "invaded" with the establishment of **Koei Corporation**'s U.S. operations and eleven Japanese software companies attempted a now-aborted joint venture with **Broderbund**. Perhaps even bigger news was the initial public offering of **Sierra** stock in August of 1988, netting close to $10 million.

In 1989, **Origin** announced that it had "graduated" from **Broderbund** at Summer CES and **Broderbund** simultaneously announced an agreement with **Distinctive Software** (now wholly owned by **Electronic Arts**) to publish entertainment products which would enhance their line. 1989 was also the year that **Electronic Arts** shook the entertainment software world by simultaneously announcing its initial public offering and determination to develop video game software. Perhaps the biggest story of 1989, however, was the massive layoff of more than half the work force of **Epyx** that preceded by a matter of weeks the Chapter 11 bankruptcy that signalled the end of the **Epyx** era. (**Epyx** still develops a minimal number of titles for the **Atari Lynx** and recently released an IBM version of *California Games II*.)

ORIGIN

March of 1990 was an incredibly eventful month for entertainment software companies. In addition to the **Mindscape** acquisition (already mentioned), **Sierra** purchased **Dynamix** on March 27th and **NEC** purchased a minority stake in **Cinemaware** on the 14th of the same month. Such business arrangements underscored the cash-hungry nature of an industry in consolidation phase.

The increased amount of litigation continued to mount in the entertainment software industry. **Microsoft** and designer Bruce Artwick both filed suit against **SubLogic** over the technology used in *Flight Simulator III*, while **Beyond Software** filed a $20 million dollar libel suit against **Cinemaware** over alleged delays and contractual breaches in *TV Sports: Baseball*.

1991 and Beyond

There are several worthy computer game publishers who, for one reason or another, did not fit into the limited scheme used to develop this history. For those omissions, we apologize, but suggest that we had to keep something in reserve for that inevitable *20th Anniversary Issue* when we present Part II of *The History of Computer Games*. **cgw**

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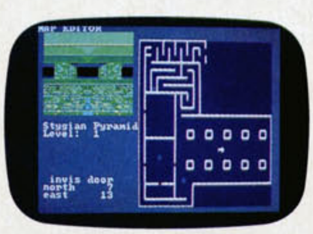
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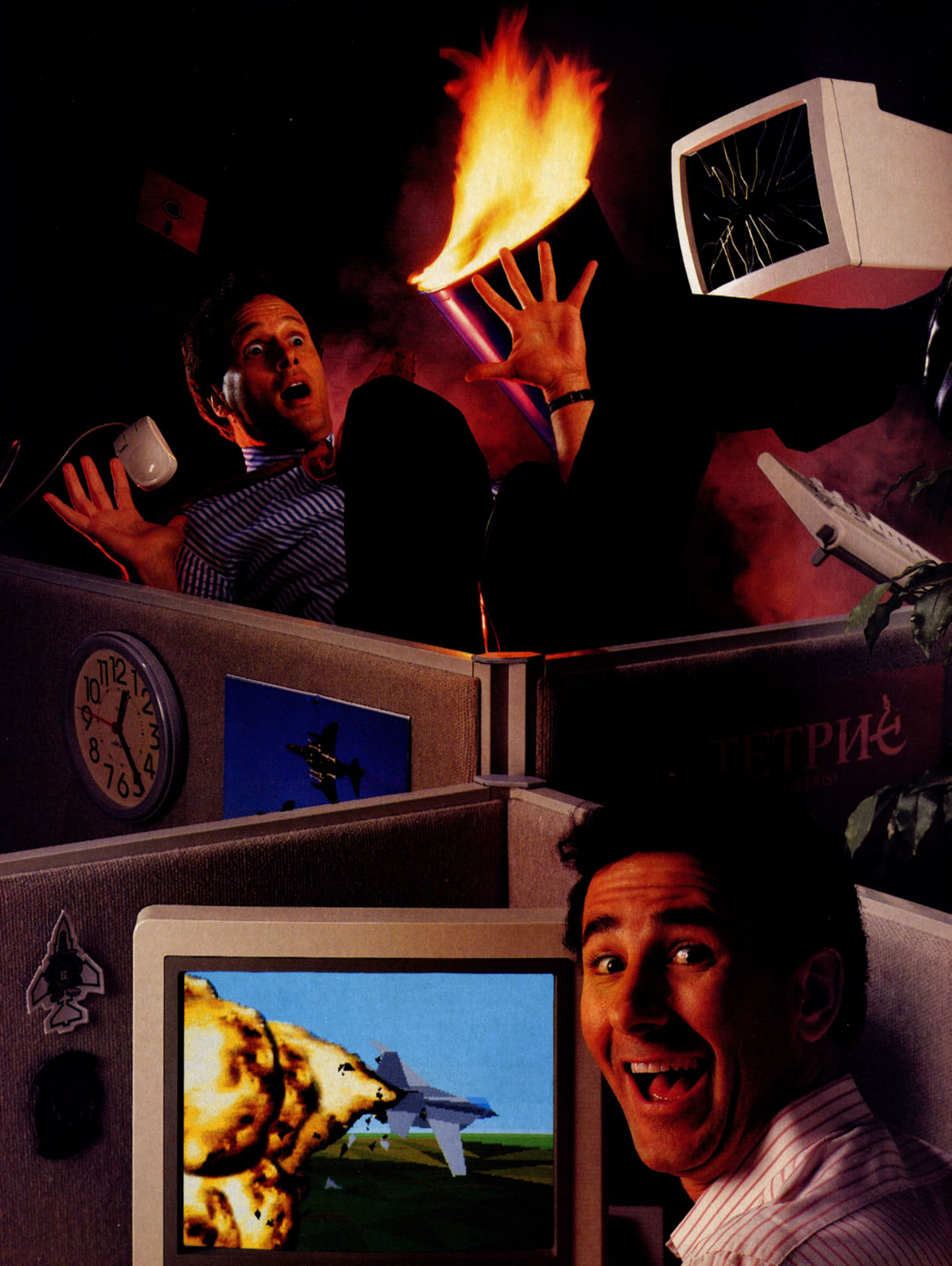




MS-DOS Screens Pictured.

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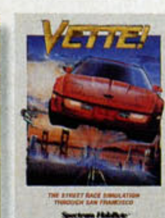
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Sequel Sans Equal

Reviewing the World of Wing Commander II

by Alan Emrich

TITLES:	Wing Commander II: Vengeance of the Kilrathi and Wing Commander II Speech Accessory Pack
SYSTEM:	IBM (640k, 12MHz minimum)
COPY PROTECT:	None
PRICE:	$79.95 + $19.95 for the Speech Pack
DESIGNER:	Chris Roberts
PUBLISHER:	Origin Systems Austin, TX

For several months now, *Wing Commander* has reigned as the number-one game, as rated by this magazine's readers. Clearly, there must be a lot "right" with this game. Even though *Wing Commander* is, at least at its most basic level, *something* of a glorified arcade game, there is also *something* that sets it apart. Perhaps it is the inclusion of a *believable*, evolving storyline, full of sympathetic comrade characters and vain, vile villains that bring a certain *je ne sais pas*. Perhaps it is simply the techno-rush of being able to use all of the horsepower one has paid for in that souped-up IBM and showing it off to friends. Certainly, it is a combination of all these attributes and more which landed *Wing Commander* at *CGW*'s Game Ratings pinnacle. What could **Origin** possibly do for an encore?

The Secret Missions

Even the folks at Origin must have been surprised at the runaway success of *Wing Commander*. This must have been underscored with the equally successful *Secret Missions* supplements to the game. Somewhere between the first and second supplement, it became clear that the game's intelligence routines were evolving to improve gameplay and the characters were evolving and expanding in number toward what would eventually become...



Wing Commander II

Subtitled "Vengeance of the Kilrathi," the story takes place ten years after "The *Tiger's Claw* Incident." Ten years ago, while the *Tiger's Claw* was launching an attack on the Kilrathi starbase at K'Tithrak Mang, it was destroyed by a new Kilrathi secret weapon: stealth fighters. While our hero was dealing with this new threat, the *Tiger's Claw* was ambushed and destroyed. Our intrepid protagonist was accused of being a traitor who made possible its destruction. Since his flight disk had disappeared, no evidence of the stealth fighters exists and, consequently, no one believes our hero (either about his innocence or about the Kilrathi stealth fighters).

Since treason could not be proved, a hostile Admiral Tolwyn throws what's left of the book at our hero, flaying him with negligence charges, busting him to captain and packing him off to the armpit of space (a system called Gwynedd), and assigning him to the most boring duty imaginable, service in the Security Forces. Fortunately for our hero, fate takes a hand and brings Kilrathi patrol ships to Gwynedd, along with the Terran carrier *Concordia*. Before long, he is temporarily assigned to the carrier and must return to exhilarating hazardous duty once again.

Plot Full of Plots

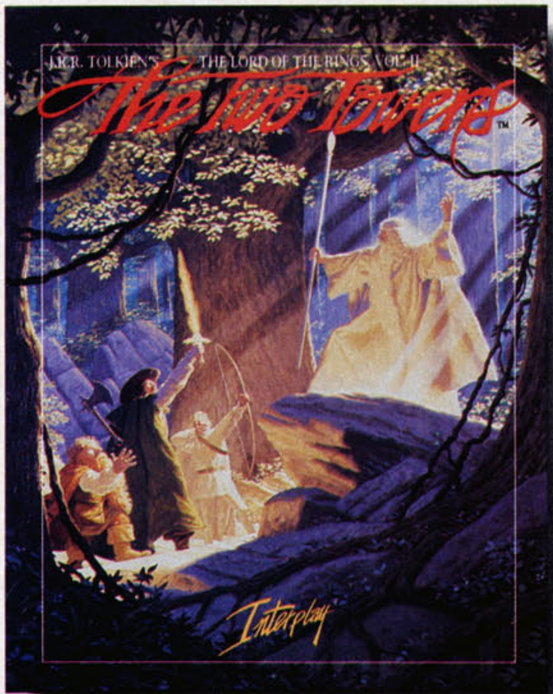
The storyline element of *Wing Commander II* is mesmerizing. With elements of new camaraderie, friction, dissension, conspiracy and suspense, an excellent mix of human *angst* is provided. Interestingly, players are allowed to look into the throne room (and the power behind it) of Kilrath. The repartee between the Kilrathi Emperor and the Prince Regent (his grandson) says much about the Empire. One gets a glimpse of Imperial politics and sees the Empire rife with opportunity for the ambitious. (No doubt the beginnings of this subplot will be extended in the *Wing Commander II: The Special Operations* expansion disks being planned.)

Worse yet, there is a traitor aboard the *Concordia* and the crew is *very* edgy. Naturally, suspicion lands squarely on the shoulders of our intrepid pilot, who is, of course, completely innocent. This reviewer was intrigued at the havoc caused by the *Concordia*'s saboteur, and was relieved to find out who it was toward the conclusion of the game. While *who* the traitor was seemed to make sense, *why* that person turned on the Confederation in the first place seemed weak. It can be conceded that, while the traitor's motive *does* stand up, it is thin — particularly when compared to all of the other potential traitors on board and their possible unique motivations. At least one gains *some* satisfaction in how the traitor is ultimately dealt with.

Conspiracies aside, there are plenty of new friends to meet and some relaxing social interaction to fill in those lonely hours between missions. The classic "bar" transition scene has been completely expunged and characters "hang out" in several different locales: the Rec Room, Flight Deck and Crew Quarters (where

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crew members gather to play poker). Some crew members still look askance at our beleaguered hero, while others openly accuse him of treacherously allowing the *Tiger's Claw* to be destroyed. Still, many old friends are more understanding and a love interest even evolves(!). In summary, the storyline has enough of the right elements (an examination of the human condition plus some philosophical perspective on the complexities of good and evil via characterizations that ring true-to-life) to begin bridging the chasm from "genre pulp fiction" to something that could be more accurately regarded as "art."

What's New, Pussycats?

Since *Wing Commander II* takes place ten years after "the incident," much has changed on the technology front. The "new, experimental prototype" Rapier fighters from the original *Wing Commander* are now the "old standbys" and still make an appearance in the game. Every other ship is completely new. For the Terran player, the Ferret patrol fighter is where one starts, but before the 31 missions required to reach the campaign's end are completed, the Epee light attack fighter, Sabre heavy attack fighter and Broadsword heavy bomber will all be subject to player shakedowns.

The greatest change over the past ten years has been the advent of "phase shields," which render capital ships invulnerable to gun and cannon fire. Now, players must launch special torpedos to finish enemy behemoths off. With a slow lock-on time, launching a torpedo in combat with flak bursting all around and enemy fighters on one's tail is much like the famous "flight through the trench" scene at the end of *Star Wars*. It can get quite "hairy," indeed.

Other techno-changes include the invention of the particle cannon (which combines the long range of the laser cannon with the hitting power of neutron guns), turrets (which players jump into by hitting the F1-F4 view keys) armed with swivel-mounted twin neutron rapid-fire guns and tractor beams (which are occasionally useful for hauling in an ejected wingman or data pod). The big defensive tech advance is the advent of chaff pods to attract enemy missiles away from one's ship. Using them properly will require some practice in timing, but the lesson is well worth learning.

Of course, the Kilrathi haven't been idle either. Among their four new fighter types are two with turrets. Players will have to develop a whole new school of tactics to deal with these kitties, because having a tiger by the tail now means getting one's face shot off!

Brains *and* Good Looks

One feature touted in the *Wing Commander II* packaging is "dynamic intelligence." This means that as the player flies better, so do the enemy. In other words, ace *Wing Commander* veterans who have built a better mousetrap with their skills and tactics will find the Kilrathi to be smarter mice (er, *cats*). Perhaps, the best way to put this is on a personal, statistical basis. In the 31 missions it took this reviewer to complete the campaign, about half were "holed in one" (successful the first time they were attempted), a third required one or two replayings (the new asteroid belts seems a bit more dense, and not *one* minefield was encountered!), while the remainder required several replayings (and one mission took this reviewer *eleven* tries). The challenge of the mission scenarios has increased, as has the demand made on a player to innovate new tactics to use and combat new weapons. All in all, *Wing Commander II*'s new "brains" will provide a stimulating challenge to players.

One other important note, here. Should a player inadvertently hit a wingman in combat, they'll ask you to be more careful (and not always politely). Hit them repeatedly, and, suddenly, our hero *confirms* everyone's suspicions that he *is* the traitor. This means the computer will hurl a never-ending stream of Terran fighters until the protagonist is transformed into space dust. No more playing space cowboy, pilgrim!

Not only are the "brains" of the game new, but so is the "look." Aside from varying the transition scenes to different settings (including debriefings from the cockpit while in flight), characters communicate from more cinematic angles. Sure, some of the motion is still a little jerky while the characters are communicating (depending on the computer's speed; at 60 Mhz, though, it is as smooth as glass), but the different "camera" angles at which they are rendered is a very noticeable and pleasant addition. Uniforms, facial expressions and background scenery have all been upgraded, giving the graphic background more of the "look" required to help one suspend his disbelief and become fully immersed in the story.

Speech! Speech!

Wing Commander II isn't exactly to computer games what *The Jazz Singer* was to the movies (the first "talkie"), but it will cer-



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tainly make a big splash in the market for more voice features as the standard for a "state-of-the-art" computer game. The digitized voices available in the *Speech Accessory Pack* are only for the Sound Blaster (or 100% compatible) cards, so Roland and AdLib owners won't enjoy the "freedom of speech" that *Wing Commander II* provides.

As far as speech goes, there are two dramatic transition scenes that are fully speech-supported. The first is the opening of the storyline (a long sequence of three major scenes and the feature of the game's popular demo disk), and the other comes after the 12th mission of the game. All the other elements of speech are the communications responses one receives while in flight. Jazz will coo, "You got it, Maestro." Spirit will exclaim, "Hei, Captain!" Even Doomsday will moan out, "We're in trouble now!" These voice responses become amusing when listening to the taunts of the Kilrathi pilots, and they are useful when a wingman notifies the player of trouble. Whether it's a request for the player's assistance, notification of ejecting or an early departure for home, it really helps to *hear* a wingman's pleas rather than risk missing them as something to be read on the HUD during the heat of battle.

Getting Technical

Wing Commander II is a big program. Really big. Starting with requiring a *minimum* of 583K of free RAM (more for those using EGA-level graphics) just to get the game to run, one must add another half a meg of *expanded* memory to get in all the "optional" goodies like the speech buffer (64K), VCR replay buffer (64K), cockpit animations, etc. Of course, the copious "free space" on one's hard disk is the next target. Without the speech module and keeping all the files compressed, there goes 10MB of disk space. Uncompress the files to save time during game play, and there goes 15MB of disk space. The voice module? Add another 6MB of disk space! Thus, when "maxxed out," say good-bye to about 21MB of the hard drive! No wonder a special blue sheet is included in the game box with a note from Robert Garriott beseeching players to invest in CD-ROM!

Hairline Fractures

For what is clearly an "A" product, Origin has opted to cut some odd corners on the game's production. Okay, so there is no nifty *Wing Commander II* hat offer.... There is also no *Claw Marks* magazine inside, either. That makes sense since *that* ship was destroyed ten years ago, but the substitute of a cheaper-looking play manual and *Joan's Fighting Spacecraft* supplement really stand out as cheap when included in such a classy package. The aforementioned plot weakness to the traitor's motive notwithstanding, this reviewer certainly hoped to hear more about *all* the survivors of the *Claw*. The one quick mention of the fate of Maniac was simply not enough.

Players will also be disappointed in the lack of fanfare. Our hero is "busted," remember, so there is no glory of winning medals, no hope for promotion from the hostile Admiral, no chalkboard where one can revel in the victory total (that number is only shown when the game is actually saved). Sic transit gloria. Finally, it seems that every Kilrathi "fighter jock" wears an eyepatch. Either this should be explained somewhere, or more than one "generic fighter pilot" should be in the graphics package.

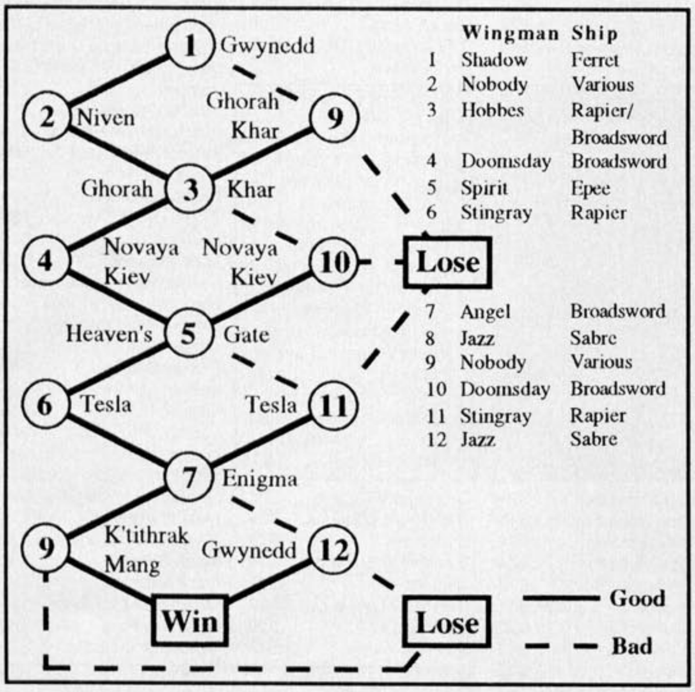
The Next Encore?

Certainly, all the advances in product quality from *Wing Commander* to *Wing Commander II* are not technical leaps. Much of the improvement came from Origin listening to consumer demands. A more engrossing storyline, better plot segues, more diverse ship types, communication hot-keys, etc. are all some things the legions of avid *Wing Commander* fans have been expressing their desire for. Please indulge **this** *Wing Commander* fan while he offers two suggestions for what must inevitably become *Wing Commander III: The Next Iteration*.

A player's success or failure in battle has always determined the storyline's overall development. This is the heart of the *Wing Commander* game system, but could it be suggested that a player's *interpersonal* successes also have a bearing on the plot line? For example, suppose that our hero was speaking to another character but was presented a few *options* for his response (i.e., snub this person, play along or politely decline their offer)? Standard adventure game stuff, to be sure, but it would add a whole new dimension to the *Wing Commander* universe! What kind of interpersonal conflicts might arise? How would our hero find a path through a moral, rather than a military dilemma? What loves and betrayals might ensue? This won't be an easy task for Origin's excellent script writers, but they certainly seem able to overcome any challenges considering the *Worlds of Ultima* line they produce.

While the previous suggestion might bring a touch of adventure





gaming to *Wing Commander*, this suggestion will have some appeal to the strategy-minded. Since our hero was clearly in a command position, perhaps a scene might precede each mission briefing in which the player must decide on what missions are to be flown and by whom. Discovering pilot personalities that "click," breaking in green recruits, staffing what are clearly "suicide" missions, etc. would all be weighed in the balance. In other words, the player would have a hand in *planning* mission rosters.

Now, certainly, the player will need to be prompted with plenty of advice as to what is going on in a particular sector of the system in which the crew is currently located, thus affording one the knowledge of what is "out there" that needs to be dealt with (and keeping the overall game within the defined parameters of the script). Perhaps something as simple as matching a list of "Missions Required" to a "Pilots Available Roster" would do the trick via a simple point-and-click interface. This might affect "off-screen" characters' fatigue levels and attrition as the status of previous missions gets reported back at the next such planning session. "Green" characters' skills might increase (although their chance of survival and/or success would be rather low), veteran pilots might need R&R or be killed. Suddenly, the efforts of the *entire crew* (*vis a vis* a player's "use" of them by their assignment orders) can also determine the outcome of the war effort.

Champagne All Around

When the dust settles at the end of the Enigma Sector Campaign (assuming the player wins), there is champagne all around. So it should be at Origin. In a game that took many, many person-years to produce, the results are clearly excellent. By constantly redefining the cutting edge, producers of high-end products like *Wing Commander II* will continue to garner the praise and support of the computer gaming community (and deservedly so). In the end, however, no matter how much gee whiz is packed into a box, the test of a game is in how it is *as a game*. Until Origin surpasses it with *Wing Commander III*, *Wing Commander II* will be flying at the front of the formation (of course, for a hundred bucks, one shouldn't expect any less), for *as a game*, it flies right and plays not only on one's computer, but also on one's emotions. **cgw**

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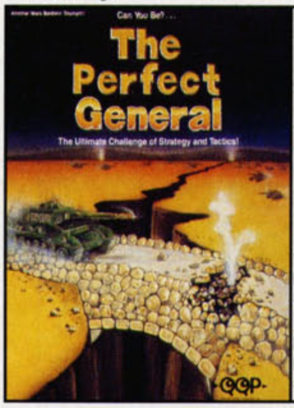
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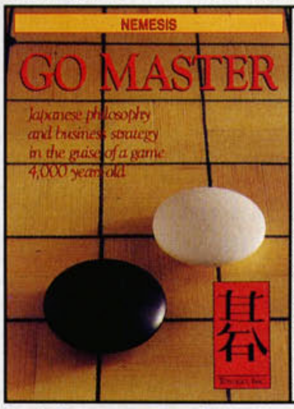
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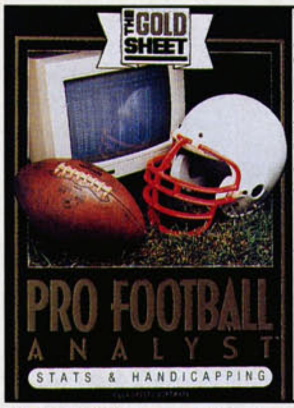
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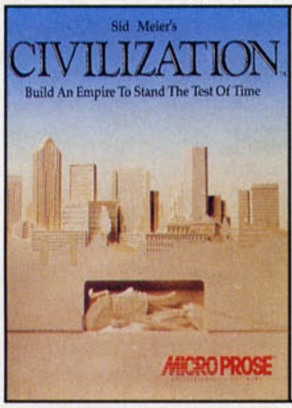
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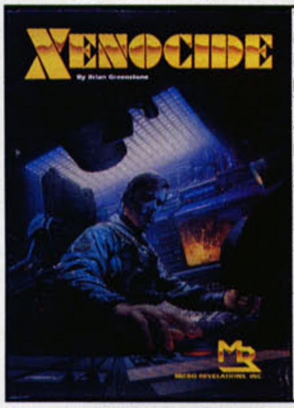


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'MIGHT & MAGIC 3' from **NEW WORLD** is a first person roleplaying game. Explore towns, dungeons, wilderness, & castles. Thousands of animated inhabitants, places & things to discover. Great music, sound fx, & speech add another dimension to game play. Automatic help when your stuck keeps you going in the tuff spots. Features pop up maps, 256 color VGA, & sound board support. **$38**

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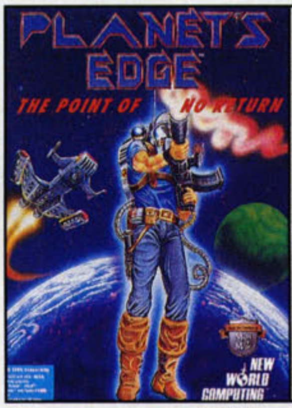


With **'CASTLES'** from **INTERPLAY** you design your own castle. Choose a site, decide where to put towers, walls, and gates, choose gatehouses and battlement heights. Allocate your work force and cash. Balance tax rates with morale to raise cash. Features realistic or magical settings, eight castle campaign game, nice animations, 256 color VGA, and sound board support. **$36**

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'PLANET'S EDGE' from **NEW WORLD** is a save the Earth sci fi roleplaying game. Track down a missing Earth & return it to its own place & time. Explore dozens of solar systems featuring unique inhabitants & environments. Design your own space ship. Features puzzles with multiple solutions, 3D perspective, strategy or real time combat, 256 color VGA & sound board support. **$38**

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Circle Reader Service #23

Computer Gaming World's 1991 Games of the Year Awards



Since 1985, *Computer Gaming World* has been honoring the most outstanding entertainment software with its prestigious "Game of the Year" awards. In general, *CGW* has awarded the best game in each category, special awards for artistic achievement and an overall "Game of the Year." Past winners in the overall category include: *Kampfgruppe* (1985), *Ultima IV* (1986), *Earl Weaver Baseball* (1987), *Empire* (1988), *SimCity* (1989) and *Railroad Tycoon* (1990).

A major distinction between *CGW*'s award year and other industry awards is the fact that they are based on the "software year" from one Summer Consumer Electronics Show (where the traditionally strong Christmas releases are unveiled) to another SCES. In this way, the awards represent a full cycle of the industry's "production year." Another distinction is the fact that the awards are not strictly the total of reader votes, industry votes or editorial votes. The editorial staff examines the releases in each category and weighs reader ratings, artistic achievement and industry impact in making the final decision.

So, as part of *Computer Gaming World*'s 10th Anniversary Celebration, we welcome you, the readers, to the 1991 *CGW* Game of the Year Awards.

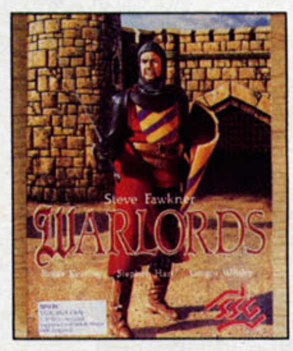
Wargame of the Year

Though 1992 may signal something of a resurrection in the traditional wargame genre, 1991 required military strategy games to offer something a little bit different. Nominees for 1991 Wargame of the Year follow. In *BattleTech: The Crescent Hawk's Revenge*, **Infocom** moved farther from the pure role-playing of its initial *BattleTech* release and closer to the game's roots in miniatures wargaming in this real-time game of tactical combat. The VGA graphics, variety of scenarios, smooth-flowing action and attention to the details of the *BattleTech* universe make this a worthy contender. **Strategic Simulations, Inc.**'s *Interceptor: Renegade Legion* is a game of tactical space combat which shows that satisfying game play can make a product successful whether it has heavy-duty "chrome" in terms of graphics and sound or not. The release of *Interceptor* spawned enough impromptu ship design competitions and ship-to-ship challenges that we believe it deserves serious consideration for the award. **Data East** released *Full Metal Planet* as part of a strategic partnership with a French software firm. This exceptional translation of a French boardgame featuring tactical combat and economic management on an alien planetary surface is noteworthy because of impressively detailed graphics and sound effects, as well as the capacity for multiple players to gather around the same computer and experience invigorating competition. *Full Metal Planet* presents a level of game play and graphic presentation worthy of a respected nominee.

Strategic Studies Group has long held a considerable amount of mindshare in the wargamer community. In *Warlords*, a *fantasy*-based wargame, the designers took the risk of breaking out of the historical boundaries to which they had previously been limited. As a result, they have created a game which not only appeals to a broader audience, but still teaches some of the basic lessons of warfare. **Microplay**'s *Command HQ* is another game which breaks out of previously imposed limits. Dan Bunten uses the modem to break out of the multiple players around a single console model of computer wargaming *without* losing the element of human intelligence such multiple player gaming provides. *Command HQ* deserves commendation for its contribution to the re-socializing of computer wargames.

And the ~~winner is~~, actually the winners are:

Warlords from **Strategic Studies Group** (Steve Fawkner, Roger Keating, Stephen Hart and Gregor Whiley, designers) and *Command HQ* from **Microplay** (Dan Bunten, designer). Both games received consis-





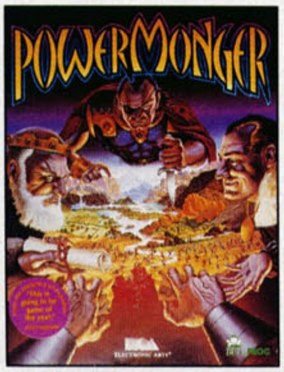
tently high ratings from the readers over the award year and co-winners seem particularly appropriate in a year in which the computer wargame genre seems to be winning back some of its audience.

Strategy Game of the Year

Strategy games also seemed to need an innovative hook in order to garner the attention of gamers during the award year. Nominees for 1991's Strategy Game of the Year run the gamut from abstract strategy to political and economic strategy. Nominees for 1991 Strategy Game of the Year follow. **Virgin Mastertronic** introduced *Spot*, a challenging and addictive game building off play mechanics similar to *Reversi* and *Go*. In its IBM incarnation, *Spot* is not only colorful and customizable, but features challenging artificial opponents, as well. **Koei** introduced a new version of its all-time most popular game (*Nobunaga's Ambition*). *Nobunaga's Ambition II* not only features graphic enhancements, but also an improved interface and the most ruthless computer opponents yet. In *Powermonger*, **Electronic Arts**' real-time strategy game from the developers of *Populous* (**Bullfrog**), players not only experienced more lavish graphics and an enlarged game world, but were forced to make economic decisions affecting human/natural resources, political decisions with regard to diplomatic posture toward other tribes and military decisions regarding when and where to attack. **Interplay Productions** pulled several strategy games together when they released *Lexicross*, Peter Oliphant's futuristic "television" game show parody. *Lexicross* blends elements of *Battleship*, *Concentration* and *Wheel of Fortune* into a clever entertainment package. **Strategic Simulations, Inc.** released *Medieval Lords* at the end of the software cycle. The game uses archaic graphics and a limited interface, but is worthy of the nomination because it is, quite simply, a "player's game." It is addictive, educational and entertaining.

And the winner is:

Powermonger from **Electronic Arts** (Peter Molyneux, Gary Carr, Sean Cooper, Glenn Corpes, Kevin Donkin, Les Edgar, Simon Hunter and Andy Tidy, designers). *Powermonger* is an exciting example of how a successful concept can evolve into an even richer game. It both rates highest, among the nominees, with our readers and represents a phenomenal achievement in programming a "world" system.



Simulation of the Year

Where 1990's top nominees in this category were land-based vehicle simulations, 1991's nominees reflect the roots of the simulation genre, flight simulators. *F-29 Retaliator* from **Ocean** proves that it is possible to have a smooth-flowing frame rate, solid flight model in terms of both damage and handling characteristics *and* realistic buildings to fly around, as opposed to the pyramids and rectangles of many polygon-filled simulations. Add to these strengths the capacity to fly head-on in modem-to-modem competition and one should have an idea of the quality engineered into this "Advanced Tactical Fighter" simulation. **Microprose**'s *Silent Service 2* is a follow-up on an all-time classic. Opinions on the game from *CGW* readers were as varied as the machines they played the game on, but the addition of new submarine types, use of digitized target images, provision for combat patrols (as well as a campaign game) and introduction of new scenarios make *Silent Service 2* an outstanding product.

Perhaps the most attention in the simulation category was focused on the World War I air combat simulations. Of these, two titles emerged as outstanding products, **Microprose**'s *Knights of the Sky* (which features modem-to-modem play and incredible action from the allied perspective) and **Sierra/Dynamix**'s *Red Baron* (which features advanced graphics and the ability to fly a campaign from either side of the trenches). Both games are worthy products and both games have their adherents. One *CGW* reviewer likes *Knights of the Sky* better and *CGW*'s contributing editor on wargames uses *Red Baron* as his current benchmark for flight simulators. Readers who respond to *CGW*'s on-going poll show a definite preference toward *Red Baron*.

So, without further ado, the winner of 1991's Simulation of the Year is:

Red Baron from **Sierra/Dynamix** (Damon Slye, designer). *Red Baron* stakes out new ground in advanced graphic techniques, flight dynamics, campaign versatility and entertainment value. Whether one focuses on the look, sound or play of the game, one experiences a vibrant, exciting encounter with history and emotion.



Role-Playing Game of the Year

The 1991 Role-Playing Game of the Year nominees present almost a photo-finish in quality. **Interplay Productions**' *Lord of the Rings* not only challenges other products to match its advances in interface and full-screen graphics, but it attempts more character-oriented activities and encounters in its very game design than most CRPG efforts. **Sir-Tech Software**'s *Bane of the Cosmic Forge* takes the *Wizardry* series in new role-playing directions. Particularly salutary are the game's multiple endings, role-playing mechanisms for skill improvement and near-transparent interface. **Origin**'s *Savage Empire* proves that a solid technological foundation can be used to tell more than one type of story. The game was not only improved by George Sanger's emotive soundtrack, but it advanced over the *Ultima VI* game engine by using *Origin*'s software-driven "tension-meter" to determine how that soundtrack should be communicated to the reader. **Strategic Simulations, Inc.**'s *Eye of the Beholder* introduces a new engine to **SSI**'s flagship line-up. The role-playing aspects are solid, largely due to George MacDonald's supervision, and the first-person perspective of the graphics offers the flashiest show this side of the Atari ST *Dungeon Master*. **Horrorsoft**, the European developer chosen by **Accolade** to develop the *Elvira* license, accomplished a similar feat with its horizontal Amiga and IBM release of *Elvira*. Not only are the graphics effective (and, at times, gory), but the interface is intuitive and the story blends just the right amount of camp, horror and puzzle-solving into the brew.

And the ~~vampire~~...er...winner is:

Elvira from **Accolade** (Mike Woodroffe, Alan Bridgman, Keith Wadhams and Simon Woodroffe, designers). Both Scorpia and *CGW* readers rate *Elvira* as a tough and satisfying game with just the right blend of combat and cerebral stimulation.



Adventure Game of the Year

Nominees for the 1991 Adventure Game of the Year include some of the most

(Continued on page 58)

MORE BABES. MORE BREWSKIS. MORE BAD JOKES.



Ah, college life! Tree-lined walks. Hushed study halls. Ivy-covered professors. The days are filled with the quiet pursuit of knowledge. The nights, however, are a different story!

ERNIE IS BACK!

Welcome to *Spellcasting 201: The Sorcerer's Appliance.* Ernie Eaglebeak is back at Sorcerer University for his sophomore year and he wants to join a fraternity. No problem, except for those quaint, harmless initiation rituals known collectively as... HELL WEEK!

RETURN TO ANIMAL HOUSE

Every night, in a mysterious chamber below the fraternity house, a vindictive pledgemaster dons a ceremonial chicken suit and burdens Ernie with a series of ridiculously impossible hazing tasks. Fortunately, Ernie knows where to get help. He creates it!

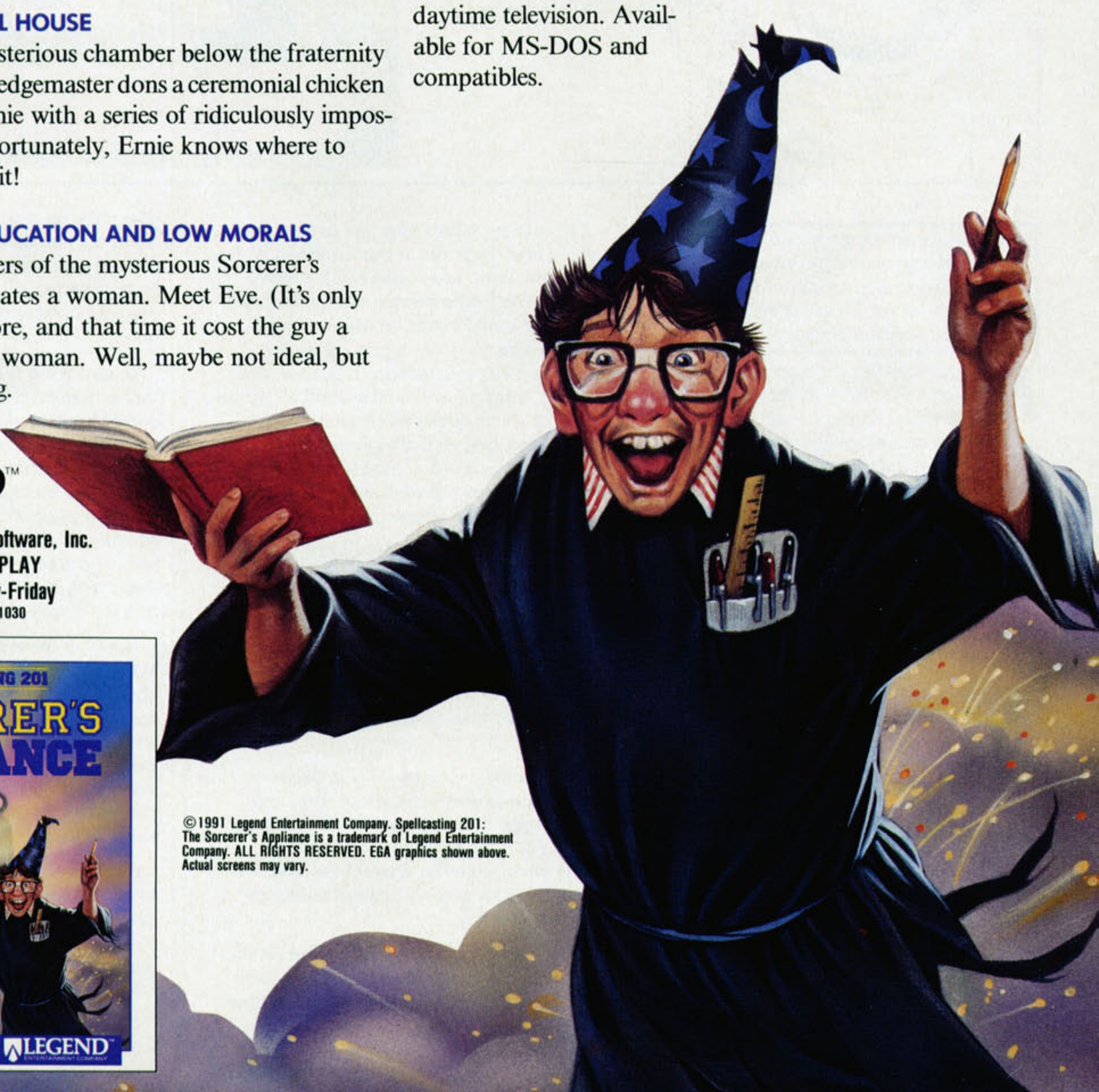
A TALE OF HIGH EDUCATION AND LOW MORALS

Harnessing the powers of the mysterious Sorcerer's Appliance, Ernie creates a woman. Meet Eve. (It's only been done once before, and that time it cost the guy a rib). Eve is the ideal woman. Well, maybe not ideal, but certainly entertaining.

WE HOPE YOU'VE DONE YOUR HOMEWORK

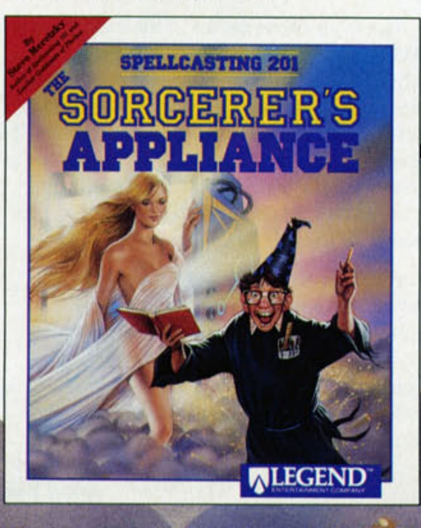
Join Ernie and Eve in this hilarious romp through the bedrooms, turrets, and tunnels of both Sorcerer University and nearby Barmaid U (where grading on a curve takes on a whole new meaning). To pass this course you'll need to cast ridiculous spells, solve ribald puzzles and "interact" with gorgeous women. Any questions? We didn't think so. Class dismissed.

From the scandalous imagination of Steve Meretzky, *Spellcasting 201* is the sequel to his award-winning hit, *Spellcasting 101: Sorcerers Get All The Girls.* These games may be considered unsuitable for young minds, as they contain material and situations that children have already seen in far greater detail on daytime television. Available for MS-DOS and compatibles.



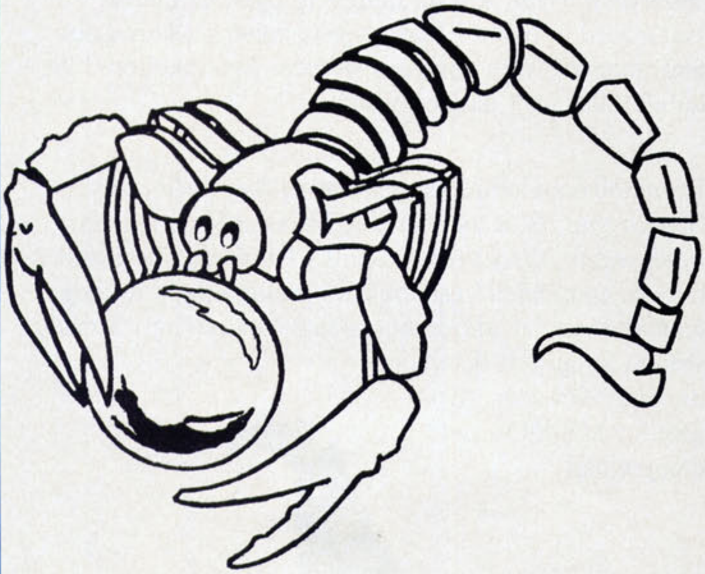
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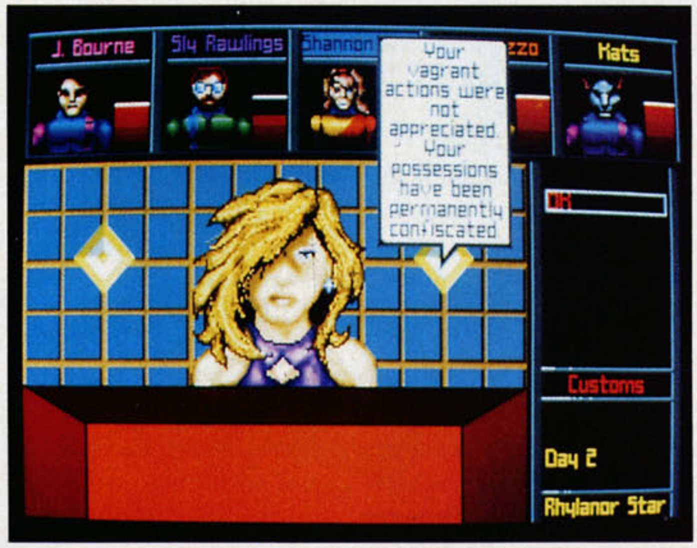
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Scorpion's View

Searching for the Ancients with Paragon's MegaTraveller II





Scorpia is an experienced and respected adventure game expert. CGW is pleased to be able to provide this forum for her distinctive and often controversial perspective.

M*egaTraveller II* opens on the planet Rhylanor in the Spinward Marches. Rhylanor has its problems: a creeping tide of slime threatens to engulf the entire world. So far, nothing has been able to stop it, or even slow it down. As a last act of desperation, the government offers 500 million credits to anyone who can stop or destroy the slime before the planet is covered by it. For that kind of money, you and your buddies figure it's worth a shot, whatever the risks.

The slime is pouring out from an "Ancient" site. The Ancients were a powerful and somewhat mysterious race that lived centuries ago. Throughout the galaxy, the remains of this race have been found from time to time, although in most cases, the purposes of the various sites have never been determined.

Since the slime is apparently an Ancient creation, the one hope is to find hitherto-unknown sites, which might possibly contain artifacts useful against the slime. This search forms the basis of the game.

Essentially, your team has to find out about and track down the locations of Ancient sites that aren't generally known. (Of course, some people do know about them, or you'd never be able to find them!) This requires a good deal of travelling around, talking to people, consulting archives and a little combat: someone out there doesn't like what you're doing and, occasionally, your team comes under sudden attack. Finding out who this enemy is, and putting an end to him, is the main subplot.

To accomplish these missions, you create a team of five characters, of either the human or Vargr (canine) races. Creation generally follows the rules of the paper-and-pencil *MegaTraveller* game, although the computer version allows for more control by the player and it's advisable that you control as much as possible.

While a full range of skills is available (based on profession), more than half aren't used in the game. These are clearly noted in the manual, so keep it at hand when creating characters. You don't want to waste precious points on worthless skills.

Skills come to a character as he or she progresses through a career. Each term of four years provides a variable number of points: as few as one or two, or as many as five or six. There's no way to control what you get, so you just have to hope for the best and put what points there are where they will do the most good.

An annoying feature is the possibility that a character may be kicked out of a career prematurely. This can happen if the service decides it doesn't need that person anymore or the character should happen to be injured during duty, forcing a mustering-out. This situation can occur as early as the second term, leaving you with a relatively unskilled character. At that point, it is usually best to dump the character and start over again.

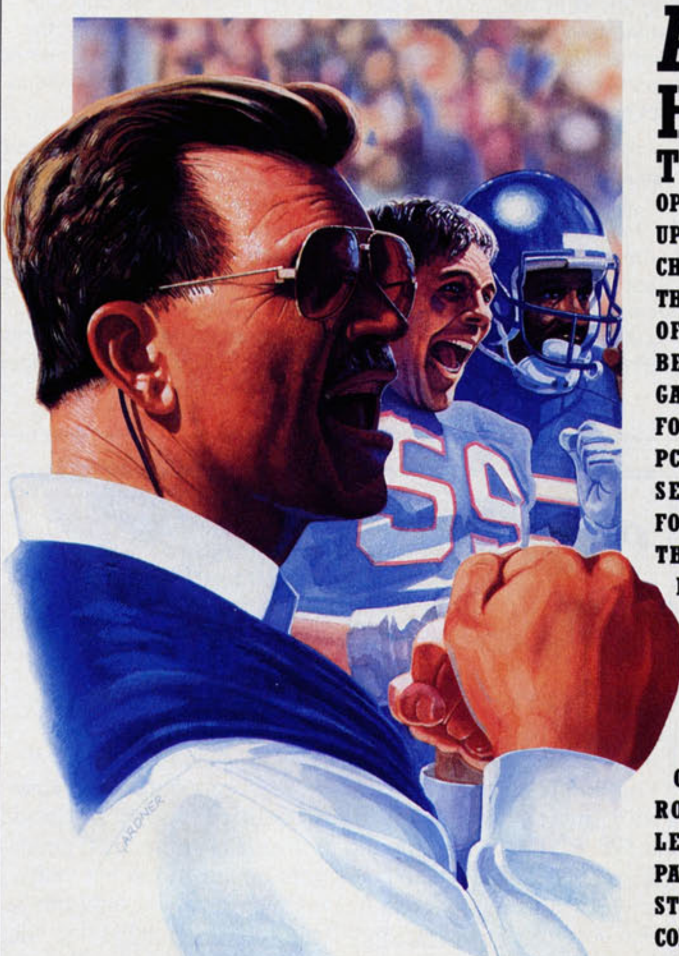
Age is another factor. The longer a character pursues a career, the greater the chance that one or more attributes will decline. This starts at age 33 (the fourth term). You'll have to decide for yourself if the trade-off in skill increase is worth the loss in stats. Personally, I sent all my characters through three terms and stopped there.

In terms of necessary skills, here is what you need: Laser Weapon for everybody. One person with high (4+) medical skill. One or more with high stealth. One with high interrogation. One with pilot skill. Beyond these, anything else is pretty much optional.

Circle Reader Service #15 >>

Mike Ditka Ultimate Football

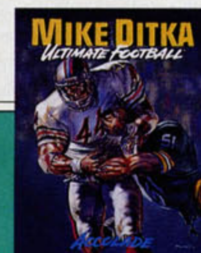
"DITKA WAS OUT TO KICK BUTT AND TAKE NAMES.



HE DIDN'T JUST WANT TO WIN. HE WANTED TO POUND HIS OPPONENT INTO SUBMISSION. DON'T HOLD BACK. NEVER EASE UP. THAT'S HOW HE PLAYED. THAT'S HOW HE COACHES HIS CHICAGO BEARS.®"

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ATV skill is not at all necessary; my team was able to operate ATVs just fine even though no one had the skill at all. Several members had Grav Vehicle at 0 level, and we never had any trouble using grav vehicles, either.

If you plan on getting into a lot of space combat, Engineer Skill and Turret Weapons are helpful. My preference was to vamoose at the first sign of trouble. Space combat is pretty boring, for one thing: the ships just sit there and trade shots at each other. For another, if you lose your weapons, it costs a fair amount of cash to have them replaced. (Your engineer can't repair them.)

Navigation is another unnecessary skill, which is pretty odd, however you look at it. Scout ships are the only ones that come with a position for navigator; you can't even assign anyone to that post in any other ship type.

Gambling is another one to pass by. While many cities have casinos, gambling skill isn't used for playing the games. You have to depend on your own ability and luck to win any money.

Training halls in the game are worthless. They offer only pilot, vacc suit and ship's boat. None of the ones I checked (and I checked many) had any other skills available. So if you want a character with particular skills, make sure they are taken during career terms.

To get around in the game, you need either a lot of money (for buying passage on liners) or a ship of your own. Ships are expensive, so it's best to try for one as a mustering-out benefit when a character retires from a career. Scout ships are not worth going for. They are only Jump-1 ships, meaning they can travel only to a planet that is "next door." Anything further away can't be reached except with a lot of planet-hopping, and often not even then.

A Far Trader, which has a Jump-2 drive, is the better choice. Although the manual states that a Far Trader will show up on the benefits table for a merchant, this is not so. No merchant I mustered out ever had a ship appear on the table. I did manage to obtain one, however, by creating a Noble and getting lucky on the benefits table.

The best vessel of all in the game is the Ancient ship at Ylaven. This has a jump-4 drive, and never needs refueling. It is practically indestructible, and has some hefty firepower of its own (the ship also looks like something out of Cthulhu). You will, however, need a special item in order to get into the ship and make it work. That's going to take awhile, so don't go rushing off to Ylaven just yet.

The game has the "PAL" system, in which members with appropriate skills volunteer to perform certain actions. On board ship, for instance, the one with medical skill takes over Sick Bay, the one with Engineer skill goes to Engineering, and so on. Sounds nice, but the system has its limits.

When my team was still using a Scout ship, the only character with Navigation decided to take over the weapons, while the ex-cop, who had no ship skills at all, decided he was going to be navigator. Fortunately, you can override this and reassign people where you want them. Just keep an eye out when people volunteer to make sure they're the right ones for the job at hand.

FLAMES OF FREEDOM™

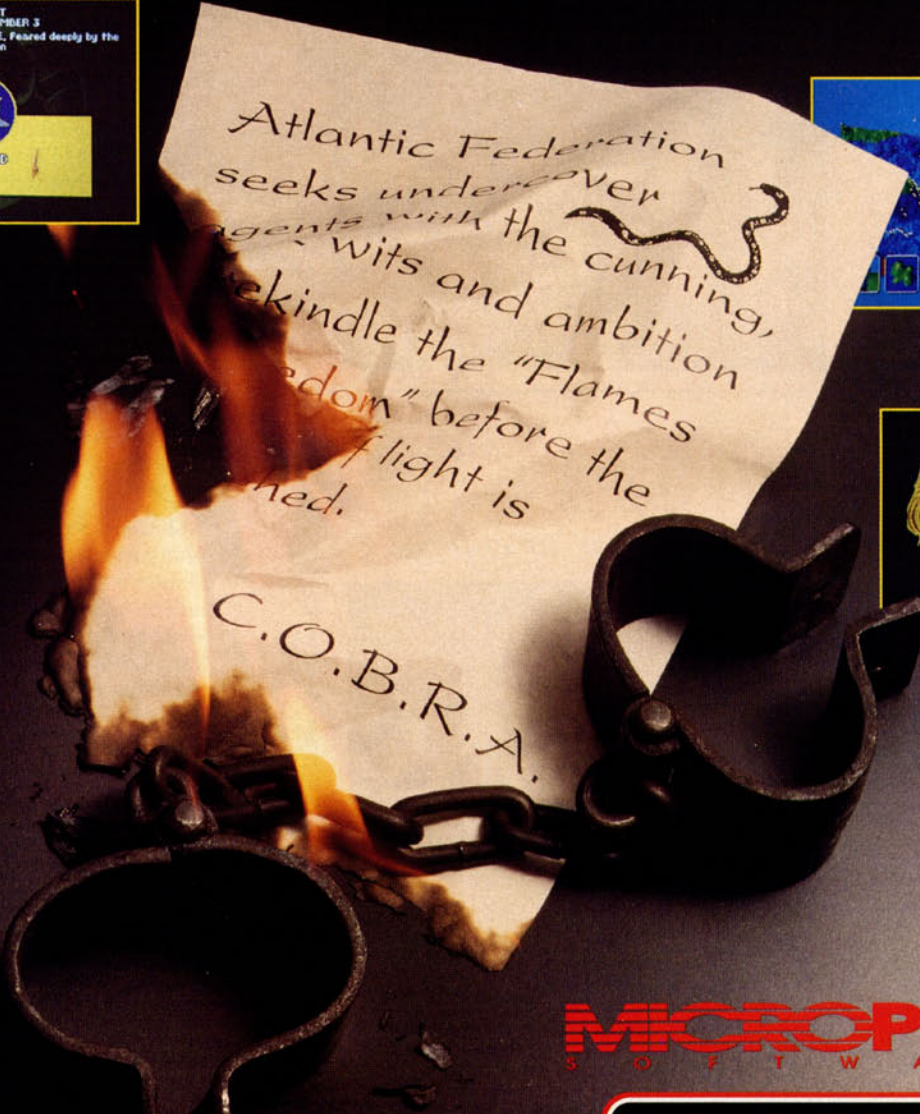
A new Ice Age ravaged the world, toppling traditional governments and destroying law and order. When the ice finally melted, the survivors found another, more ruthless menace: the Saharan Empire, a brutal, totalitarian regime determined to control and manipulate everything in its path; an empire so powerful it can only be defeated from within.

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Can you spark a tiny flame of freedom into a wildfire of revolution?

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IBM screens shown. Actual screens may vary.

One member of the party should be an ex-Scout, and another should be ex-Navy. Many worlds have restrictions on the weapons you can carry around with you; these will be confiscated when you go through Customs, and returned when you leave. However, if there is a Navy or Scout base on the planet, the party can sneak out the back door of the base without going through Customs at all. Just make sure that the party leader is of the appropriate service when you do this.

Some worlds have no service bases at all. For those, you need someone with high (4 or better) Stealth. Stealth is what allows characters to smuggle illegal weapons past Customs. Number of items is not a factor here. I had only one person (Riley) with Stealth skill, and he usually had no problems in smuggling through all the weapons for the party. Riley might be carrying two Gauss rifles and three laser pistols (plus ammo) and he'd get it all past the Customs officials. The only weapons he had a hard time with were the plasma guns.

Be careful not to start any fights if you have items confiscated by Customs: you won't get them back. It's okay to kill anyone who shoots at you first, but if you start the shooting you're in trouble. This is a good reason to get everyone into armor as soon as possible.

Vacc suits are the best you can buy on the open market, and it's a good idea to buy a suit for everyone in the party. Later, you'll find some combat armor, but vacc suits are good for most situations.



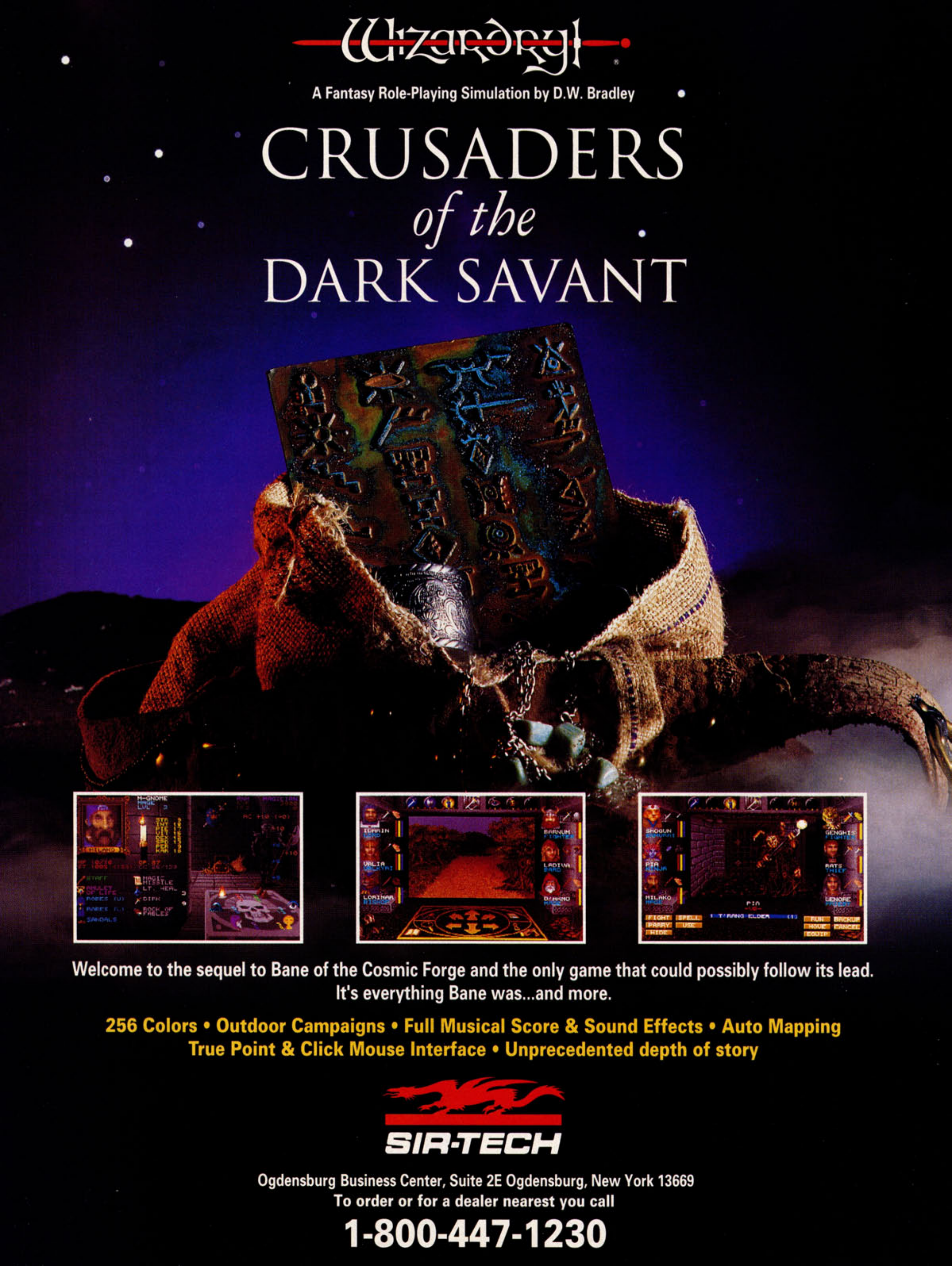
For all this talk of weapons, armor and smuggling stuff through Customs, there isn't much combat in the game. Aside from the enemies who shoot at you from time to time, and criminals you might want to kill for the bounty money, there's really no fighting to speak of. However, since you never know when you might be fired on or run into a wanted criminal, it's best to go armed and armored everywhere.

Combat has definitely been improved. Party members can be placed in "react" status, so they will fire automatically at anyone who shoots at the team. No need to switch around between characters and give commands. There is also a "reserve" status for those who you want to stay out of combat; when the shooting starts, they head for the hills.

All cities, regardless of tech level, have pretty much the same layout. All the standard stores (weapons, vehicle rental, universities, police stations, etc.) are always in the same locations, when such things exist on a particular world. This makes special buildings stand out and easier to find as you walk around town. (Often, people you want to talk to are in such buildings.)

On the streets, people with anything to say show as little green dots. They move around, so first you have to get close enough to use the "hail" command to stop them. Then you face the person and start a conversation. You may want to look at them first, in case you just stopped a wanted criminal wearing battle armor and toting a plasma gun. This is a good time to back away without starting a conversation (you're safe as along as you haven't actually talked to them).

Getting through this game can be difficult. There are so many worlds to visit, so many people you can talk to, and so many sideline plots, that you can become overwhelmed by the detail and lose the main threads. A lot of these sideline plots are ways of making money,


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but this is not always evident. You may end up going halfway across the Marches only to find what you're doing is a money-making enterprise and has nothing to do with your main goals.

This is a real problem, as time is critical in the game. You have only 2700 days to save Rhylanor. That sounds like a lot until you remember that every time you travel to another world, a week passes. (This is standard, regardless of distance traveled.) Time also passes quickly when you're exploring the wilderness, looking for Ancient sites. (Always choose grav vehicles when available; they're fast.)

In general, it's best to restrict money-making to selling pictures of new sites and killing wanted criminals for the bounty money. After you've saved Rhylanor, you'll have plenty of time for following up on the extraneous stuff.

The Ancient sites are a disappointment. You get a very nice description when you first enter one. After that, they're mostly the same inside: you just walk around looking for loot bags (all sites have one, and several have two), pick them up, and hurry back to Rhylanor to try out an artifact on the slime. That's all there is to the sites.

None of the artifacts has any lasting effect on the slime, either. At best they only slow or stop it for a short time. After using one, check in at the government office to see if you get a reward for your efforts, then go sell the artifact and picture to Trow Backett.

All this becomes rather dreary and mechanical after a while. Find a site. Find the artifact. Go back to Rhylanor. Use the artifact. Sell it. Find another site, etc., until you finally have everything you need to visit Grandfather (the head honcho of the Ancients), who will give you the item you really need to stop the slime once and for all.

On the plus side, the interface is simple and easy to operate. Combat is generally de-emphasized, and no longer the nightmare it was in the previous game. The setup is basically non-linear, allowing you to go where you want, visiting the sites in any order, taking time out to follow some other thread, and so on. The use of archives (checking library files for information) is a nice touch.

On the down side, the game is a boring implementation of an interesting story, complicated by too many side threads that have nothing to do with the main plot. Once the novelty wears off, there's no sense of exploration or being in new places; wherever you go, every place seems like every other place you've been, in spite of differences in graphic representation. The long list of character skills is mainly useless, except for creating characters for the pencil-and-paper version of *MegaTraveller*. (For this, it's a very good utility.)

Overall, while *MegaTraveller II* is an improvement over the previous game, it hasn't improved quite enough. Skills have to be more fully integrated into the game. More attention needs to be paid to fleshing out major storylines, and less on side plots unrelated to the main goals. More variety in different locations is a necessity. Until these are accomplished, the *MegaTraveller* series will be, at best, of only marginal interest to fans of science-fiction CRPGs. **CGW**

The Games: Winter Challenge

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ID	Total	Left	Done	%Done	INIT	Task Description	Due	Pred
59	12h		Y	100%		Shape Draw	12/4/90	
60	12h		Y	100%		Shape Flip	12/4/90	
61	12h		Y	100%		Shape Move	12/4/90	
62	12h		Y	100%		Shape Fill	12/4/90	
63	12h		Y	100%		Shape Shade	12/4/90	
64	30h		Y	100%		Document Editor Code	12/6/90	
65	18h		Y	100%		Altitude Shift Display	8/1/91	
66	#####	####	####	95%		User Interface	8/27/91	
67	42h		Y	100%		Menuing System Core	12/10/90	
68	24h		Y	100%		Menuing Revisions	12/5/90	67
69	24h		Y	100%		Pulldown Menu bar	12/5/90	
70	24h		Y	100%		Area defs for Map/Shapes/Pal	12/5/90	
71	72h		Y	100%		Type data dialog box	12/13/90	
72	12h		Y	100%		Item data dialog box	12/4/90	
73	12h		Y	100%		NPC data dialog box	12/4/90	
74	12h	1h		0%		Config File	8/27/91	57
75	12h		Y	100%		Spell book dialog box	5/9/91	
76	#####	####	####	100%		Schedule Creator	8/7/91	
77	78h		Y	100%		Schedule entry menu	12/14/90	
78	6h		Y	100%		Select NPC map location	12/3/90	
79	18h		Y	100%		set game time	8/7/91	21
80	18h		Y	100%		Scheduler Revisions	12/5/90	
81	18h	6h		0%		Item data set & store	8/9/91	79
82	18h		Y	100%		Type data set & store	12/5/90	
83	18h		Y	100%		NPC data set & store	12/5/90	
[illegible]	12h	[illegible]	Y	100%		Item/terrain select via TM collide	5/30/91	
			####	80%		Import	8/27/91	
				100%		Import Dpaint Shapes	12/3/90	
						Import w/Type+Flags for that	8/7/91	
						[illegible]rt wo/Types from other	8/27/91	74
							12/6/90	
							12/3/90	

There are plenty of fuzzy terms in the entertainment software industry and one of the fuzziest is the phrase "man-year." When a software company says, "...a millennium of man years in the making" or some other marketing phrase, it is very likely that the average consumer has no real concept of what that phrase means. "It must be good," reasons the computer gamer, "because it means it would take 1,000 years for one programmer/designer to make the game." On the other hand, the average computer gamer has no clue as to what could possibly take so long.

Judging from the *CGW* mailbag, most computer gamers seem to think that computer games are finished and in the can several months before the release date. As a result, there seems to be a tremendous amount of frustration and hostility pent up among computer gamers. To help ease this negative karma, *CGW* has been focusing on "Behind the Screens" articles which explain the process of developing computer games. This article is designed to expose even more of the process. It is based on material gleaned from visits to three companies engaged in "state-of-the-art" product development and is a proportional amalgam of the way work fits together on almost any game.

For purposes of the article, a non-existent game entitled *Cyberfunk X: The Transgression* shall be examined. The hierarchy of **Wetware, Inc.** has decided to make the quintessential sequel to their megahit *Cyberfunk IX: The Depression*. The basic storyline for *Cyberfunk X: The Transgression* is written and approved and it is time for coding to begin.

Library Card

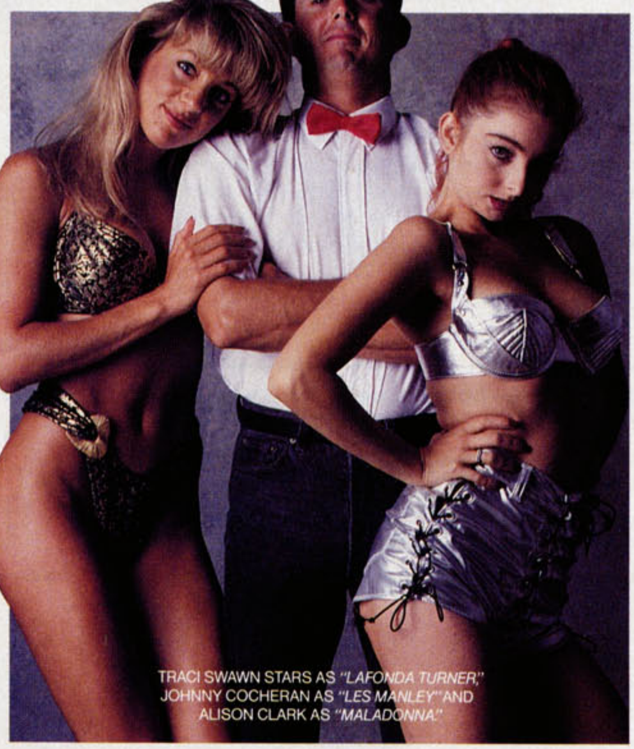
Major releases usually require a certain amount of updating of the company's basic library of programming routines. These are usually low-level programs that facilitate virtually everything else that happens in the game. In the case of *Cyberfunk X*, the low-level programmers spent more than 24 hours creating new font routines and a font handler in machine language. It only took six hours to upgrade their print and I/O routines, however. The big expenditure of time that had to be accomplished prior to any work by the art department was the development of machine language files to handle flipping images, drawing outlines of shapes and anticipating shape collisions. The time investment on these basic files amounted to approximately 190 hours. In short, one programmer would have to spend six weeks (not counting overtime) to code part of the low-level routines necessary for programmers of the high-level code to work.

Les Manley in: Lost in L.A.

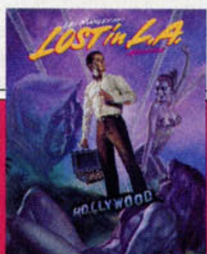
"SHE STOOD NAKED,

HER WET BODY BATHED IN BEVERLY

HILLS MOONLIGHT. THE STRANGER CREPT OUT FROM THE SHADOWS TOWARDS THE POOL. LIKE THE STARLETS WHO HAD VANISHED BEFORE HER, SHE WAS OBLIVIOUS TO HIS MENACING PRESENCE. HER SCREAM WAS NOT HEARD." THE HIPPEST STARS IN HOLLYWOOD ARE BEING KIDNAPPED. AND ONLY ONE MANLEY CAN SOLVE THE CRIME OF THE CENTURY. *LES MANLEY IN LOST IN L.A.*™ PLUNGES THE HERO OF *SEARCH FOR THE KING*™ INTO A MEGA-MYSTERY THAT SPANS ALL OF LA LA LAND. MEET GORGEOUS BABES, BODY BUILDERS, ROCK STARS, OUT-OF-WORK ACTORS— ALL FULLY ANIMATED AND DIGITIZED IN AWESOME 256 VGA CALIFORNIA COLOR. HERE'S A REALITY CHECK (LIST) • LIVE VIDEO FOOTAGE OF REAL ACTORS AND ACTRESSES • A POWERFUL PLOT AND DIALOGUE FROM A PROFESSIONAL SCREENWRITER • REAL COOL CHARACTER SCALING WITH FULL ANIMATION • ROCKIN' L.A. SOUNDTRACK WITH TOTAL MUSIC & SOUND BOARD SUPPORT • REAL L.A. LOCATIONS—FROM HOLLYWOOD BOULEVARD TO MULHOLLAND DRIVE MANSIONS • REAL EASY 100% POINT & CLICK CONTROL • SO IF YOU WANT A HOT STORYLINE, A SHOT TO SOLVE A MYSTERY AND THE GLAMOUR AND GLITZ OF SOUTHERN CALIFORNIA, GET *LOST IN L.A.* LIKE IT'S TOTALLY REAL, DUDE. TO ORDER, VISIT YOUR FAVORITE RETAILER OR CALL 1-800-245-7744. ACCOLADE™



TRACI SWAWN STARS AS *"LAFONDA TURNER,"* JOHNNY COCHERAN AS *"LES MANLEY"* AND ALISON CLARK AS *"MALADONNA."*









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Editor-in-Pieces

Once the library is updated, it is time to create the "editor" for the game's further development. The development team on *Cyberfunk X* spent roughly 80 hours to create just the right look and feel to the map window for the game and ascertain that the map window scrolled correctly as the player moved the on-screen party along. Developing a routine for loading and saving the map data cost approximately the same number of hours. The same team spent nearly 70 hours to create "cache" routines for shapes and cells, as well as about 100 hours for sorting the "objects" used in an "object-oriented programming" approach.

At the same time, high-level programmers were investing over 250 hours in revising the user interface so that the menus functioned more efficiently, pull-down menus operated properly, conversational interaction with NPCs could be facilitated and the "wetware" interface (the fictional equivalent to a spell book interface in fantasy role-playing or tool/equipment interface in other role-playing) could be accessed. Even something as typical to every software publisher as creating tools to handle the importing of images from *Deluxe Paint* took nearly 90 hours to code.

The high-level programmers had to build routines to handle the timelines and locations for non-player characters, moving items and the contents of those items about on the screen, special effects at particular locations and terrain characteristics. 18 hours were invested in creating the look and characteristics of *one* vehicle in the game and another 18 hours were spent on making that vehicle move correctly on the map.

The programmers are also given the task of creating, in 530 hours, an "Install" program that sets up all the attendant subroutines and customizes everything for the individual gamer.

Global Reconstruction

Once the library routines and basic editor functions were in place, the *Cyberfunk X* team focused on building the game world. It cost more than 600 hours to create a fully functional map. For example, design teams must spend about 200 hours to draw the basic buildings and floor plans for a role-playing environment. Then it takes an equivalent amount of time to draw, design and add furnishings for those buildings. "Triggers" for certain events must be designed, drawn and implemented (60 hours), "Set Encounters" must be established at various locations (60 hours), "Items" necessary for the completion of the plot must be placed (60 hours) and more. In this cyber-adventure, the artists and programmers spent more than 80 hours in creating obsolescent portions of the matrix so that those who had played *Cyberfunk I-IX* would realize how much time had lapsed between adventures.

To further enliven this adventure, the design team spent 200 hours to create "scripts" for the actions and schedules of non-player characters (in this case, other cyber-cowboys). Developing the basic statistics for non-integral villains (monsters in fantasy games, aliens in many sci-fi games) cost nearly 40 hours and generating weapons stats, softwarez to fight the electronic protection of the matrix, price lists for the 'warez and definitions of useable objects incurred another 80 hours or so. The design team

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spent about 60 hours to delineate the knowledge available to non-player characters and put it in data files.

All of this effort does not even take into account the nearly 200 hours needed to create a main program loop to utilize this data, the 100 hours needed to develop routines for handling projectiles nor the 60 hours to write routines to manipulate those non-player characters' schedules created earlier.

Joining the Right Movement

Indeed, most of us do not even consider how much effort goes into making the on-screen characters, NPCs, villains, monsters and vehicles move. In *Cyberfunk X*, a group of cyber-cowboys move through the cyberworld of the matrix together. Since these are presumably intelligent characters, the party has to move through the matrix "independently," but in concert with the other "independent" characters. So, the design team developed a routine so the cyber-cowboys could move through the matrix without tripping over disadvantageous circuits, traps and alarms, as well as a routine so that the group did not look as if it were playing "follow the hacker." It took more than 180 hours to implement these two routines.

Add to these hours the ones mentioned earlier for handling special vehicle movement and about 120 hours for special animations/movement used by distinctive AIs which the cyber-cowboys encounter and one begins to get an idea of the immensity of the programming task. Then, recognize that the player's on-screen character gets an even more thorough treatment. The on-screen hero/heroine costs nearly 1,500 hours in order to be able to get items, drop items, attack, talk, use, move and interact realistically with the on-screen terrain.

Hack and Slash

Designing and implementing the basic combat algorithms cost 100 hours of programmer time. Adding animation for the "combat" between the cyber-cowboys and the AIs cost another nine hours and animating the projectiles launched by the 'warez cost another 19 hours or so. Yet, the development team wasn't anywhere near finished. They spent almost another 500 hours writing code for when the NPCs engage in "combat." Add 80 different kinds of 'warez (i.e. spells, tools/weapons) that cost about 200 hours to design and implement and one gets an idea of how long something as relatively simple as combat takes to develop.

Sounds Like Victory

Sound effects (AI noises, cyber-cowboy noises, weapon sounds, vehicle sound emissions, computer beeps, ambient soundtrack, etc.) take nearly 500 hours to "compose" and implement and digitized voices take around 100 hours per character to record, modulate and link into the game. Since *Cyberfunk X* has a main title theme and a matrix theme that are fairly extensive, the producer budgeted a full week to produce those themes. Incidental themes (combat, escape, imminent danger, etc.) are budgeted from 6-18 hours depending on the particular length and complexity of the piece. Then at least two days must be spent linking the soundtrack pieces into the game.

They Talk Alike

Since *Cyberfunk X* is a role-playing game, there have to be conversations between the player's character and the non-player characters. In developing *Cyberfunk X*, the producer has elected to divide the NPC conversations among six members of a writing team. Their task is to write more than 250 complete conversa-

(Continued on page 110)

It's a Human Zoo

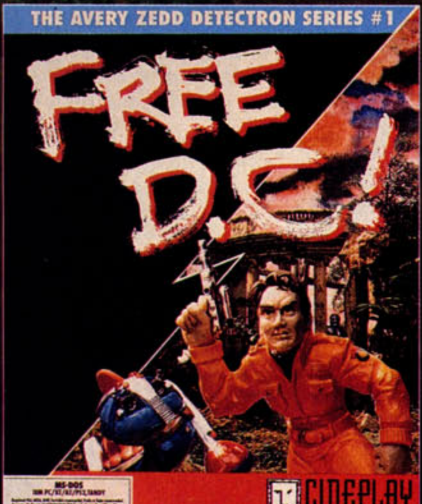


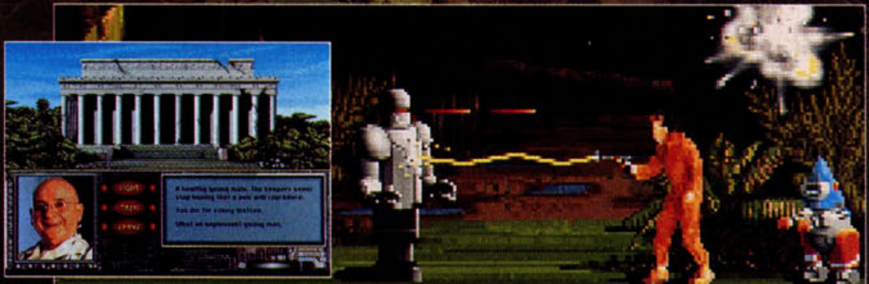


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Actual screens from IBM version

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When Dave Stevens created *The Rocketeer* for **Pacific Comics** (1982), it was simultaneously a tribute to the heroes of the old Saturday matinee serials and a rich, colorful celebration of a nostalgic past. That nostalgic past celebrated the innocence, patriotism and fortitude that the present seemed to have lost. Stevens' attention to the detail of the pre-World War II era, his classic melodramatic sense of storytelling (complete with visual references to pulp heroes like Doc Savage and Justice, Inc.) and bold, dramatic drawings of his hero (as well as the luscious lines used to embellish his sensuous heroine) combined to capture the imagination of the comics-buying public.

When **Walt Disney Studios** decided to produce *The Rocketeer* as a feature film, comics aficionados in particular and nostalgia buffs in general were thrilled. The cinema screen seemed the ideal canvas on which to paint the larger-than-life story of heroism and honor found in *The Rocketeer*. The story had come full circle. Inspired by the silver screen, it had returned in Technicolor splendor. It was a classic motion picture, the tale of an ordinary man who through extraordinary circumstances discovers hidden resources.

Now the story is undergoing yet another equally appropriate transformation. **Walt Disney Software** has produced a game based on *The Rocketeer* that paints the nostalgic tale of heroism on a brand new canvas, the computer screen. There is more than one type of nostalgia in *The Rocketeer* computer game, however. Not only does it present the same type of detailed renderings of pre-war memorabilia and technology, but the gmae's action sequences are reminiscent of some classic arcade games in computer game history (*Defender*, *Karateka*, *Shooting Gallery* and others). In fact, about the only thing about *The Rocketeer* that is *not* nostalgic is the new technology being developed by **Novalogic**, the developer chosen by **Walt Disney Software** to create the game. Somehow the game seems to be just the right match of technological wizardry and old-fashioned game play.

The Race Is On (Game Description)

The Rocketeer computer game does not simply retell the script of the film. Instead, it advances the story via comic page-style splash screens that narrate the events leading up to an arcade sequence and the arcade sequences which determine whether the player will progress in the story or not. In the game, Cliff has to earn the right to wear and use the rocket pack rather than simply stumble across it as he did in the film and comic. This, of course, leads to an arcade sequence. In this case, the arcade sequence is a standard air race in which Cliff must pilot his choice of three classic planes to victory. The sequence opens cinematically with a gray-scaled image of the field that segues into a brightly colored screen.

The arcade sequence uses two of the three pylons generally found in an air race. This is because the planes which players pilot around the pylons during the race are delightfully bit-mapped (with bit-mapped shadows linked to the plane images) and the problems involved in having the planes fly around a third pylon (and, consequently, scale down to a size that would indicate a three-dimensional depth to the race course) were simply too formidable for the amount of game play value it would have added. As it is, players must learn how to use altitude as a speed factor and how to cut ahead of their competitors in tight turns.

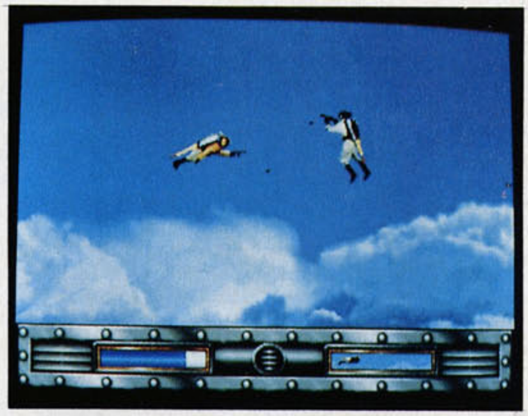
Once the player has mastered the basic air race, he/she finally gets the opportunity to become the Rocketeer. This time, the jet pack is strapped on Cliff's back and the player pilots the Rocketeer around the same racecourse. The same basic lessons apply in this race, but the player has more power to deal with, so cornering becomes more of a challenge.

The next sequence is somewhat reminiscent of a shooting gallery game. The fifth column agents recruited by the Nazis try to steal the jet pack and Cliff must stop them. The digitized images of the bad guys pop up from behind the various props scattered about the hangar and

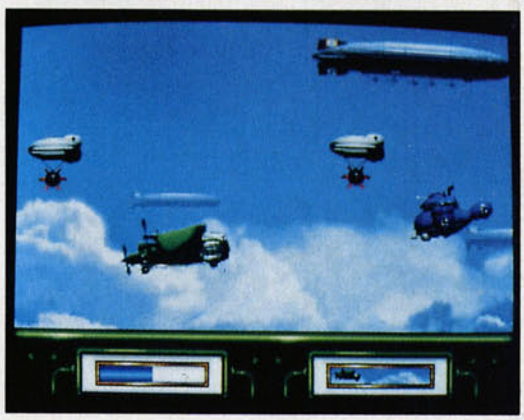
on the Computer Screen

The Rocketeer









the player directs the Cliff Secord figure to aim and shoot at the traitorous scum. This is one area of the game where **Novalogic**'s technology really shines. The 3-D figures operate in a credible three-dimensional environment such that players almost feel like they are directing a scene out of a film. One senses the villains as "actors" more than one would normally expect in a computer game.

Naturally, Jenny gets captured by the Nazis and, as the plot advances, Cliff discovers that the Nazis have their own elite troops of aerial Aryans. So in a sequence which functions as a tribute to *Defender*, the Rocketeer flies through horizontal-scrolling wave after wave of Aryan adversaries until he reaches the zeppelin where Jenny is being held captive.

The player must also learn to operate another piece of pulp-era science fiction technology, the Locust. In order for the Locust to be available for the climactic rescue sequence, it has to get by an armored flying tank. Finally, Cliff lands on the zeppelin and goes through the ritual horizontal-scrolling boxing sequence prior to rescuing Jenny. The trick, however, is managing to duck, punch, move and climb *without* falling off the airship.

Tools To Make Howard Hughes Jealous

Walt Disney Software was not content with simply producing a montage of arcade sequences loosely joined together with comic book storyline. So they challenged **Novalogic** to give the game a different look than arcade games of the past. **Novalogic** had been working on a three-dimensional modeling process for some time, so it only seemed natural that they bring some of their technology to the production "party."

In order to get the action/animation to flow as smoothly as possible, the developers videotaped human actors in costume as they walked, fought and jumped through the motions of each sequence. This, of course, meant that the programmers now had a videotape that presented the action at an impossibly fast frame rate for the computer to display. So they performed a motion analysis of the videotape and chose the key frames of animation to use in the game itself. The finished game art is developed from those key frames.

Of course, several gamers will wonder how the images in the game moved from near full-screen images to the miniature characters that cavort around the digitized sets. According to John Garcia of **Novalogic**, the company starts from 24-bit images and uses their custom sizing routines to reduce the characters to the optimal size for use on the particular platform. In this way, the company has been able to make a game that looks as good on the **Super Nintendo** system as it does on an IBM compatible.

The final technological twist is the developer's proprietary three-dimensional modeling technology. As in their upcoming *Ultrabots* game (from **Data East**), the designers use ray-tracing to generate a three-dimensional model of a vehicle. Once that model is in memory, of course, it can be placed anywhere in the game. For example, there is an armored flying tank that appears twice in the game. The AFT is a computer-generated model, but it appears from more than one angle in the game. (The battle with the Locust takes place from a different direction than the earlier appearance of the tank.) Not only are the uses of this technology impressive as they appear in *The Rocketeer*, but they bode well for future products as well.

Sometimes, A Hero's Got To Do...

In short, **Disney**'s *The Rocketeer* does exactly what one would expect a high-tech entertainment company to do with a property that celebrates nostalgia: celebrate the past with the innovations of the present. When *CGW* first heard about *The Rocketeer* project, we had imagined a role-playing game based on the character. **Disney** focused on the action aspects from the outset. They noted that those of us who identify with old "shell-head" really wish we had the capacity to fly against and fight with the Nazis, as opposed to out-thinking them. If their concept is correct, Rocketeer fans are going to be *very* happy with this innovative presentation of nostalgia. **CGW**

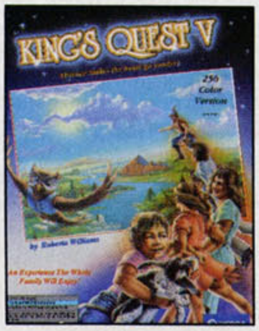
Games of the Year

(Continued from page 40)

prolific and venerable designers in the genre. **Legend Entertainment**'s *Spellcasting 101: Sorcerers Get All The Girls* brings the work of **Infocom** celebrity Steve Meretzky back to the computer screen. Meretzky's creativity and humor combine with **Legend**'s new graphic adventure system to inject new life in the adventure game genre. **Sierra/Dynamix**'s *Rise of the Dragon* is an excellent example of how pioneering designer Jeff Tunnell is attempting to push technology to the point where computer games can *really* tell stories. Jeff has never rested on his laurels and *Rise of the Dragon* points to even better things to come. **Lucasfilm**'s *Secret of Monkey Island* unleashes Ron Gilbert as a game designer in his own right. Ron not only developed the original **Lucasfilm** tools for building graphic adventures, but he is continually presenting raucous humor, challenging puzzles and subtle social commentary in his products. *Secret of Monkey Island* is a "must play" for every adventure gamer with a sense of humor.

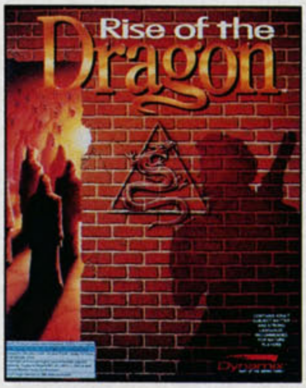
Sierra has always dominated the adventure game genre. 1991 was no exception as Corey and Lori Cole reprised their award-winning game design in *Quest for Glory II: Trial By Fire* and Roberta Williams, the designer who carved out the graphic adventure genre over a decade ago, unveiled a stunning new game in her best-selling series, *King's Quest V*. *Quest for Glory II: Trial By Fire* is notable for the way it blends the role-playing and adventure gaming experience into a distinctive hybrid. Everything about the game design seems well-thought and cleverly presented. *King's Quest V* deserves special recognition, however, as an exemplary work in a gold-medal series. By using digitized paintings, parser-less interface, the exceptional musical talent available at **Sierra** and her own unique blend of fairy tale-based puzzles, Roberta has created perhaps the crowning glory of her *King's Quest* series.

And the winner is, appropriately enough on *CGW*'s 10th Anniversary, *King's Quest V* from **Sierra** (Roberta Williams, designer). *King's Quest V* combines technological advance with an intuitive understanding of her audience that only a true artist could achieve. Like the *Ultima* series in computer role-playing, the *King's Quest* experience continues to climb to new heights.



Special Award for Artistic Achievement

As warranted, *CGW* will often present a special award to games which, in some fashion or another, blend artistic techniques, technology and entertainment presentation in a way that advances the *art* of computer game design. Such a product is *Rise of the Dragon* from **Sierra/Dynamix**. Everything about the game is beautifully rendered and consistent with the dark, brooding nature of the game's cyberpunk plot. The musical score, digitized presentation of graphic novel-style art, threatening dialogue and digitized film clips all combine to present a worthy and formidable entertainment experience.

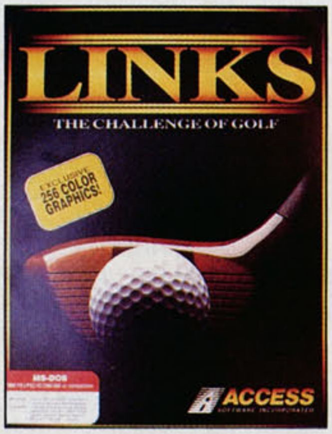


Action Game of the Year

In 1991, *CGW* readers were impressed by the action experiences provided by space combat, World War I aerial combat and golf. The nominees for 1991 Action Game of the Year follow. **Cinemaware**'s *Wings* (soon to be an IBM release by **Konami**) is a cinematic look at WWI air combat as though the "campaign" were a classic film. The arcade action is **Cinemaware** at its best and the cinematic touches are just right. **Origin**'s *Wing Commander* is Chris Roberts' *magnum opus*. The action game features the most advanced graphics techniques in the genre, a "tension-meter" soundtrack that perfectly paces the action, identifiable non-player characters and a story beyond the fast-paced action. **Access**' *Links* features the most ambitious graphic look to ever embellish a sports game. In addition, the golf model is challenging and satisfying so that *Links* is more than a showpiece (which it is), it is a game! *Jack Nicklaus Ultimate Golf* combines enhanced graphic appeal with the brilliantly implemented course design disk. Golf fanatics will appreciate the ability to customize their own courses without having to sacrifice the quality of play they have come to expect from **Accolade**'s line of golf games.

And the winner of the 1991 Action Game of the Year is:

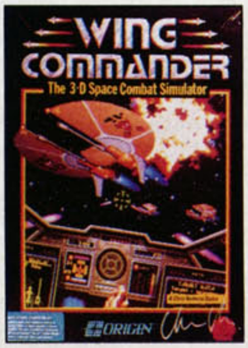
Links from **Access** (Vance Cook, Kevin Homer and Roger Carver, designers). With its capacity for user-designed "special swings" and attention to both audio and visual excellence, *Links* is a watershed product for the action game genre and its sports subset.



CGW's Game of the Year

Now, however, is the time for the confetti to fly, the noise makers to blow, the applause to reverberate from every wall and the champagne corks to pop like artillery at Waterloo. The winner of 1991's Overall Game of the Year is:

Wing Commander from **Origin** (Chris Roberts, designer). *CGW*'s readers have kept *Wing Commander* in the top spot since its inception. It is the number one game mentioned as a point of comparison when one travels about the entertainment software industry (whether among publishers, retailers or designers). It is the cornerstone of a new and successful line of products. It has singlehandedly encouraged more readers to upgrade their current computer systems than any other product we can remember. So *Wing Commander* receives this approbation in recognition of its place as the game in 1991's software year which has most impacted the hobby. If only there were a "tension-meter" with a wide enough bandwidth to measure the attendant applause around the world which has been garnered by this milestone product! Applause! Applause! **CGW**



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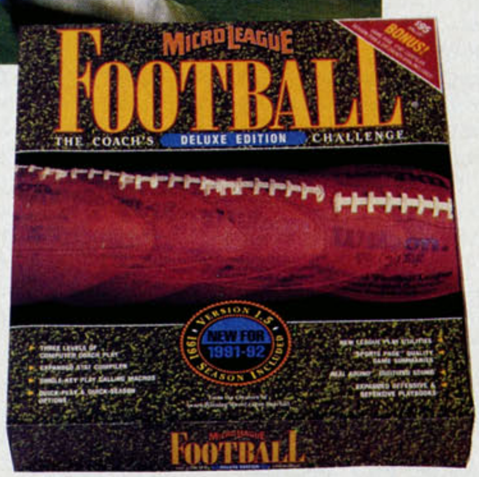
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Climbing the Fiscal Mountain

Networking the Sierra Way





Everyone, it seems, is to some degree a student of human nature. We all notice faces. We *like* friendly faces. Let it be said that *The Sierra Network* can boast some of the friendliest faces ever to grace an interactive computer network service. There is the rub, too: Friendly, interactive gaming with an on-screen smile.

Mug Shots

Welcome to *The Sierra Network* (*TSN*). Players begin by taking a quick game preference survey from among a list of standard "family favorites," and then proceed to create a self-portrait. With the help of a "clip art" style face generator program, players are soon setting the width of their jowl, the length and style of their hair, eye color and accessories (such as hats and earrings) as they design their own "self portraits." In short, if people can't see their own reflections in the monitor, they can (at least) create their "fantasy" images of themselves. Up to six family members can be stored, so constant redrawing can be avoided (except as one gets older, of course).

The Computer as Game Parlor

At some point, most people have broken out the cribbage board or backgammon set and played a game at home. The same might go for checkers, hearts, chess and rummy. All of these games can be played interactively on *TSN*, with the best part being the inclusion of a graphics interface which uses either a mouse or keyboard input and commands so intuitive that, literally, no instructions are necessary to get going.

Players meet by perusing all of the faces "hanging around" in the lobby area of *TSN*. By clicking on a face, that player's survey information (age, city, gaming interests and expertise, etc.) appears. Players can then invite another person on-line to a game, or drop in on a game in progress and "observe" it. All the while, players (and observers) may "chat" (type back and forth to each other). Having spent hundreds of hours on most of the various game networks, this reviewer can attest that *TSN* is among the most consistently wholesome and friendly places to meet people and play games. Nasty bulletin board strings do not plague *TSN* as they do some other networks and, one suspects, it because the focus on *TSN* is *gaming*, as opposed to being primarily an information service.

Quoth the Raven

Perhaps *most* exciting about the arrival of *The Sierra Network*, however, is the prospect of multi-player gaming such as has never been possible before. Even people who do not care for action games like *Stellar 7*, for example, are very likely to get excited about a multi-player *Stellar 7* in which up to four Ravens are scooting about wreaking havoc on the world at large. The uneasy real-time diplomacy, the capacity for hurling insults as one bears down upon a "human" rather than a "computer" victim and the suspense of trying to outsmart "real" intelligence rather than "artificial" intelligence is absolutely exhilarating. The present writer doesn't particularly like "arcade"-style games, but *Stellar 7* on *TSN* really got him excited.

With plans for a multi-player *Red Baron* and a *Leisure Suit Larry* environment already in gear, *TSN* will eventually have enough *unique* games to keep any gamer excited. Many gamers will be skeptical about joining a network to play backgammon and cribbage, but anyone who knows the technological brilliance of **Sierra** in developing computer games should not doubt the surprises that await users of *TSN* in the future.

The investment firm of **Volpe, Welty & Company** estimates that **Sierra** will invest approximately $2 million dollars in the network this year. Considering the type of entertainment that two million would produce in their traditional products, one ends up with a tremendous sense of anticipation with regard to the multi-player environment that **Sierra** will be unveiling in incremental stages. **CGW**

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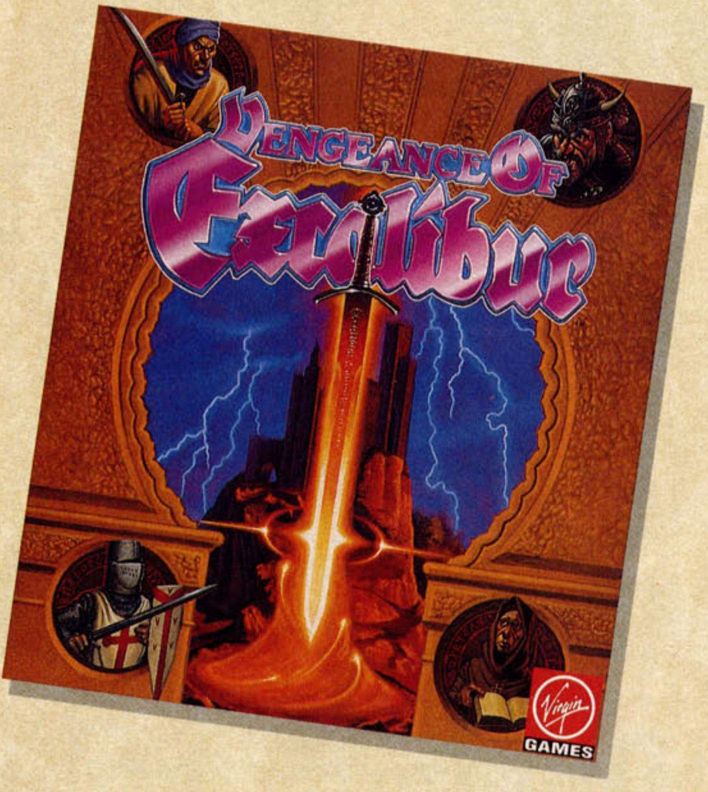
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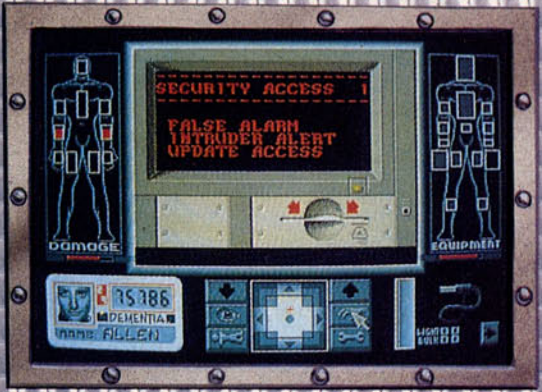
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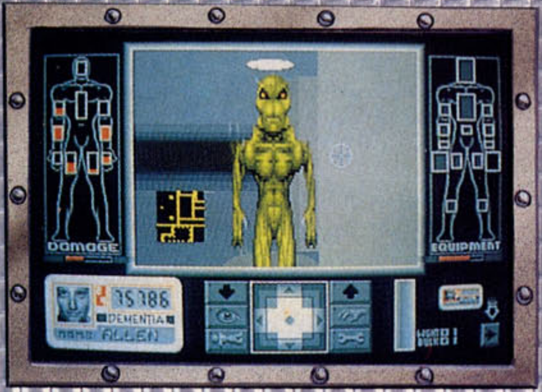
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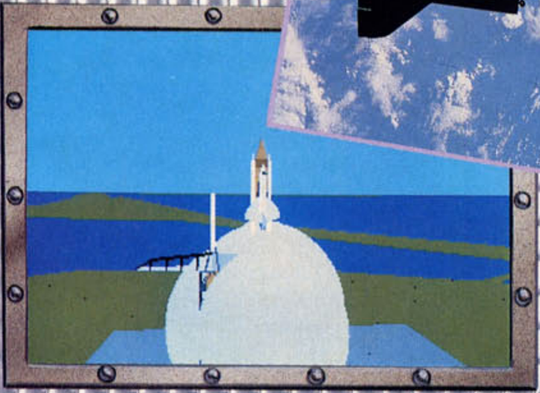
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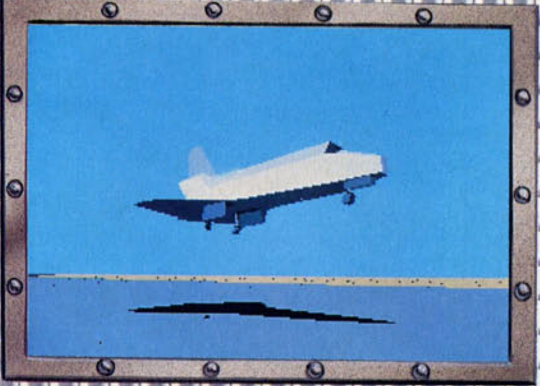
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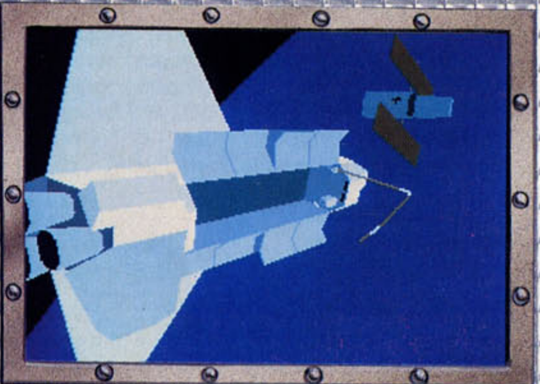
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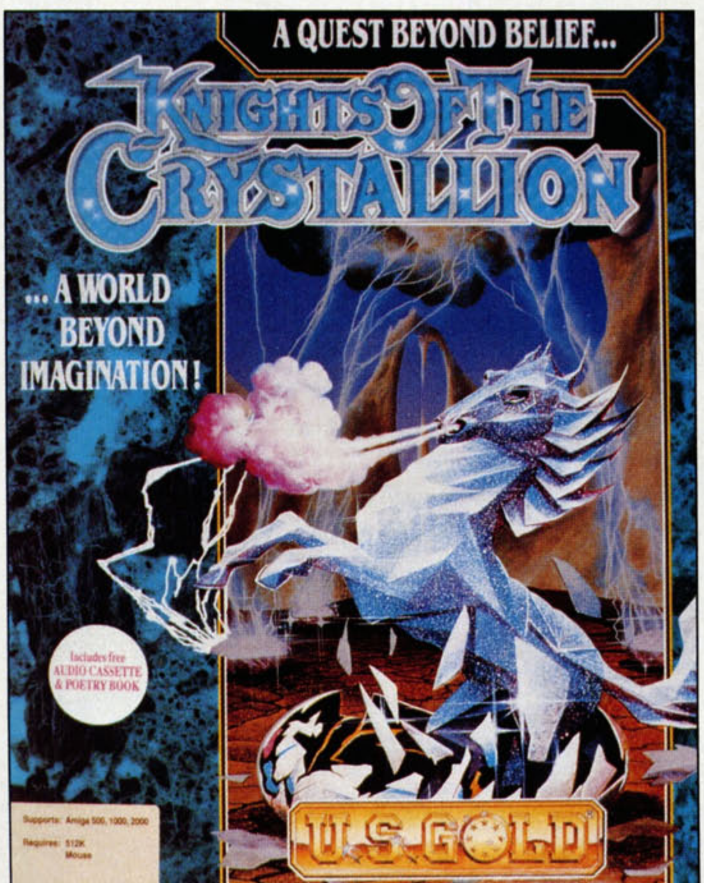


Knights in Bright Data

U.S. Gold's Knights of the Crystallion

by Allen Greenberg

TITLE:	Knights of the Crystallion
SYSTEM:	Amiga
PRICE:	$59.95
COPY PROTECT:	Disk-Based
PUBLISHER:	U.S. Gold San Jose, CA



"Without civic morality communities perish; without personal morality their survival has no value."

—Bertrand Russell

Without a good zap-gun, this community is in trouble. If one can accept the notion that morality, economic sensibility and a good trigger-finger are not mutually exclusive in life, then the neighborhood known as Orodrid may prove an attractive place to settle. *Knights of the Crystallion* (*KOTC*), another British import from **U.S. Gold**, combines action, strategy and role-playing in this ancient mythical community. The game has some awkward moments, but is generally an enjoyable experience featuring an interesting story, dazzling graphics and a remarkable musical score.

Bone-Age Economy (Game Play)

In *KOTC*'s era, the prevailing real-estate market is such that a tribe has taken up residence inside the skeletal frame of a long-dead aquatic serpent which must have been at least the size of New Hampshire. Within each of the creature's ribs live multi-clan populations which work together in a mutually supportive "bone-age" economy. Part of the object of *KOTC* is to survive and prosper as one of the rib-dwelling families who deal in several trades. There is some buying and selling of goods which goes on in this section of the game, along with occasional opportunities to invest in trade with the skeletal suburbs. Each family must help the others survive, particularly when a disaster such as disease or fire strikes. When this happens, all families are called upon to contribute to the unfortunate group. The consequences for not doing so could be disastrous should a similar crisis hit one's own family.

While controlling his finances, most of the player's attention will be focused on a quest to reach some rare and supernatural crystals hidden deep within the skull of the great beast. There are four mazes which separate the player from this treasure, populated by murdering insects, lizards and other animated headaches. Mapping and navigating the mazes is an interesting task because each section of the maze is both unique and graphically impressive. The various creatures which occupy these subosseous caverns must be blasted by the hero, and this is neatly done using the mouse. That same device is used to point out the desired path for the hero to follow. Also within the maze are other, less important crystals. These crystals must be gathered and taken back to the surface to be used for a special purpose.

Unfortunately, in order to use these lesser crystals, the player must submit to the game's most irritating arcade sequence. The crystals are used to "recharge" the hero's magic armor to make him less vulnerable to attack by the creatures in the maze. To accomplish this, the player must arrange the crystals in a particular pattern while avoiding other moving objects. The three-dimensional animation is as superb as the game-play is frustrating. Things fly, change and crash so rapidly that only the most dedicated arcade fanatic can hope to achieve a desirable result. A more liberal time-limit or a less frenzied pace in this section would have improved *KOTC* immeasurably.

Another, less frustrating, exercise is a game of concentration. Sixteen cards are displayed face down from which the player chooses two each turn in order to find a matching pair. This deck, however, magically shuffles itself increasingly quickly and with greater frequency as the game progresses. Nevertheless,

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there is hope for the player, as he begins to gain some psychic energy which enables him to read the value of the card from the reverse side. The backs of the cards, by the way, are nicely animated. The psychic energy developed in this part of the game will serve the player well when he returns to the mazes. There, he will be granted subtle flashes of insight to help guide him on his way into deeper levels. Other talents are also given to the player as he accumulates this energy.

An exercise which resembles both Chinese checkers and reversi is the last talent which the player must master in order to complete *KOTC*. There are unlimited opportunities to learn this interesting game before the player enters the mazes, and the program includes both a tutorial section and an option to allow a second player to participate in this section only. This user-friendly challenge takes a nasty turn, however, when the player must deal with it in the maze.

In between each of the four mazes, the player is challenged by the computer to a round of the checker/reversi game. Should the player lose after being given several chances, he is booted back to the surface. As if this were not sufficiently threatening, *KOTC*'s designers have chosen these same sensitive points in the game to implement the program's copy protection. The player is requested, in multiple choice format, to provide some information about a poetry book which accompanies the game's manual. A swinging metronome passes over the available choices until the player hits the space bar, indicating the pointer is over the correct answer. Proper timing is a factor in this, thus adding an inappropriate arcade aspect to the affair.

HAMming It Up (Graphics and Sound)

KOTC's visual effects are unique among the standard- setting graphics of other European software publishers such as **Psygnosis**. The program is one of the few to take advantage of the Amiga HAM (Hold And Modify) mode which allows the computer to display 4,096 colors. The result is more ethereal than realistic, but pleasing nonetheless. In addition, each scene is remarkably three-dimensional and contains none of the simple left-to-right movement which characterizes so many European releases.

The program's musical score and sound effects are also deserving of special praise. Ranging from primitive to symphonic and laced throughout with the whispers of human voices, it embellishes the presentation admirably. An audio tape of the music is included in the package, but it sounds, unfortunately, as though it was amateurishly transferred from the computer in someone's recreation room.

KOTC contains no disk-based copy protection and can be installed on a hard drive. A blank disk is required in order to save games in progress and a minimum 512K of RAM is required.

Knight Cap (Conclusion)

The diverse yet interlocking segments of *Knights of the Crystallion* have been well-balanced and orchestrated so that the result is enjoyable. Certain moments, however, such as the ordeal with the crystals, have led this reviewer to wonder what European publishers fear to lose should someone (heaven forbid!) actually win one of their games. CGW

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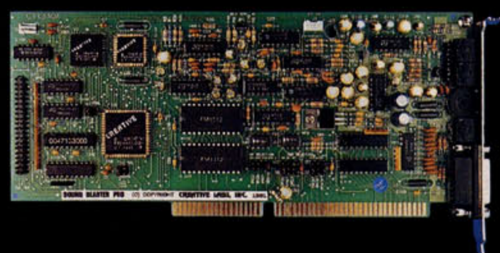
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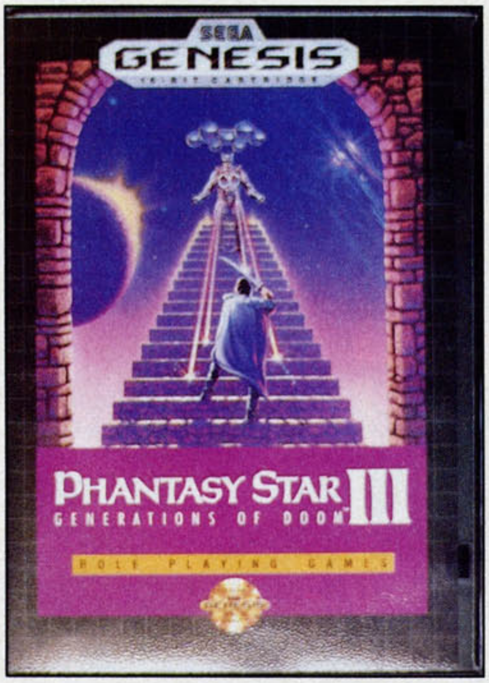
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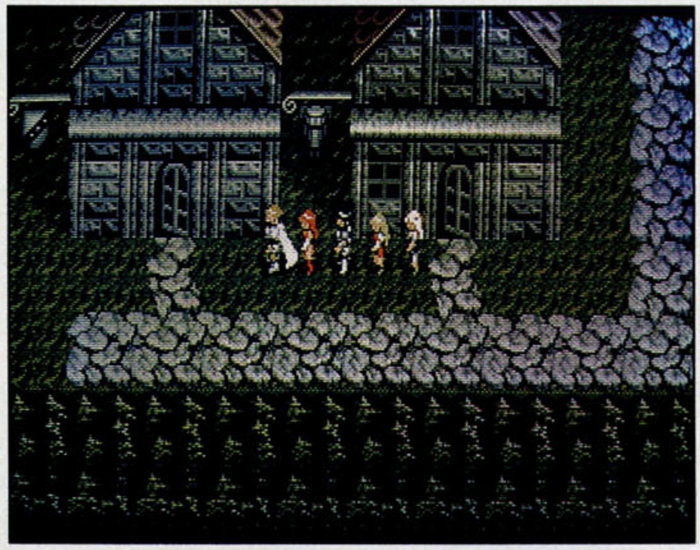
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PUBLISHER:	Sega of America Redwood City, CA

Can Computer Gamers Convert to Cartridges?

Sega Thinks So With Phantasy Star III

by Matt Taylor

Matt Taylor is a syndicated video game columnist.

All right, console gamers, it's finally time to come out of the closet; no need to worry about the *CGW* staff writing another obnoxious editorial deriding the so-called "twitch and flex" cartridges. The three major hardware suppliers in the dedicated machine market, **Nintendo**, **Sega** and **NEC**, have bulked up their growing lists of role-playing and sports titles, games which will more often give players a strategic workout than thumb blisters.

Actually, many users have been out of the closet for some time now, happily adventuring through original RPGs like *Final Fantasy* on the **NES** and *Lands of Ys* on the **TurboGrafx CD-ROM**. Still others have been experiencing console conversions of the most popular computer software, including the *Wizardry*, *Bard's Tale*, *Ultima* and *Advanced Dungeons & Dragons* series. For the skeptical (probably the majority of *CGW* readers), this long-time cartridge connoisseur will attempt to provide an enlightening perspective on the latest in one of the standard-setting line-ups from **Sega**, *Phantasy Star III: Generations of Doom*.

Phantasy Star originally appeared on the 8-bit Master System in 1989, and graduated to the 16-bit Genesis last year (reviewed in *CGW* #78). These carts are unique because of the seamless merger of medieval fantasy and science fiction into one grand quest. Laser pistols and swords are often purchased in the same shop. Dragon-like beasts and cyborgs can be encountered in one combat. The inhabitants of the *Phantasy Star* world are constantly flirting with technological advancement, which often proves to be their downfall.

In part two, the Mother Brain, Controller of All That Was Well and Good in the Universe, went absolutely berserk. A being known as Dark Force was behind the malfunctions. *Phantasy Star III* takes place a full millennium after the second episode, but Dark Force is still wreaking havoc on electronic equipment throughout the galaxy.

Some will be disappointed to learn that there are few tangible


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connections between the two most recent titles other than ol' Dark Force. The champions of part two are not to be found, not even in the form of descendants. Still, there is a neat explanation of how total catastrophe was averted in the last chapter by the inhabitants of Palm (whose planet went up in smoke), and how they wound up in this third installment.

In the opening sequence, it is explained that the player (Rhys, a prince) was about to marry a mystery woman named Maia, who had washed up on the shores of his homeworld with no memory of her past. Then a winged beast spirited her away to parts unknown. Now, Rhys must rescue her and at the same time uncover one of the oldest secrets of his land — why Orakians and Layans bitterly hate each other enough to constantly send cyborgs to battle for supremacy (while abstaining from personal hand-to-hand melee) and what Dark Force's role in the conflict is.

If those one-dimensional save-the-princess-and-whomp-the-baddies stories in other video game semblances of RPGs have gotten a might tiresome, *Phantasy Star III* promises even the most jaded player plenty of plot twists and turns (even though the initial objective of recovering the damsel in distress *seems* like every other game in the genre). The player must always portray a man (videogame designers have yet to come to grips with "sexist" role-playing), but he may marry one of two wives at the conclusion of each of three "generations." (Women are not ignored in the game's fictional context, simply relegated to a traditional and subservient role.) The wife chosen will have a direct impact on the next generation's player character, who simply happens to be, of course, the newlyweds' son. The decisions made with regard to the player character's matrimony will significantly impact which of four possible game endings will occur and the personalities of the characters who may join a party of adventurers. Thus, unlike most of its genre, *Phantasy Star III* lends itself to several replays. Unfortunately, there is one important drawback. While a battery saves one's progress, there are only two storage files available, so it's tough to negotiate a time-efficient completion of each possible generation.

Although the whole of *PSIII* is much too large to cover with a play-by-play, many of the situations make for interesting journey and discovery. As mentioned earlier, the people of this world seem ravaged by the horrors of mechanical failures, berserk machinery and simple ignorance of the contraptions left to them by their ancestors. One of the seven worlds, for example, was frozen due to negligence of a weather-control gadget.

Occasionally, the player must perform the obligatory "find the key to enter the next dungeon and fight the boss monster," but usually the tasks given by villagers are more intriguing.

As far as graphic presentation, the Genesis custom processors worked magic. The towns are portrayed with strikingly realistic detail, down to the shingles on the roofs of shops and shadows of the people who reside in them. This time around, when one enters a building, he can actually walk around inside and ascend stairs in order to converse with occupants. An angled top-down view proves once again to give a perfect window into the player's ramblings through the *Phantasy Star* universe. The music provides an adequate atmosphere.

Those who enjoyed the battle sequences in the earlier installments may be disappointed in the latest incarnation. In the first two games, a first-person perspective displayed the player's party staring down the barrel at human, half-human and otherwise misshapen creatures, all animated in deadly detail. In *Phantasy Star III*, the opponents are just as mean-looking, but one's characters are no longer represented physically on-screen, so instead of jumping to the attack (or being the recipient of such hostile action), a wound simply appears in the monster's gut. On the other hand, an annoying part of the original setup, the lack of a background illustration (before now it was just a featureless grid), has been rectified.

Probably the best news for fans of this latest adventure in the land of fantasy mixed liberally with space opera is that it is far easier to control one's party and administer individual commands.

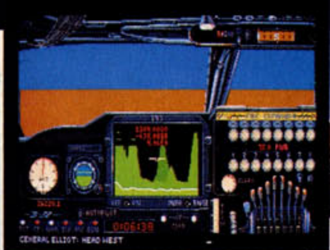
If all this combat, exploration and rescue sounds too challenging, **Sega** has published a separate hint book (unlike *Phantasy Star II,* where the hint book was included with the game and was actually a detailed walk-through).

There is no denying that *Phantasy Star III* relies heavily on combat and level-advancement to fill most of the hundreds of hours required to complete just one of the four endings, occasionally to the point of tediousness, but it's fairly rare that the player will be forced to stop the journey and just build levels. Another quibble (again extremely minor) is that while the marriage choices and different personalities add a certain spice to the game, the basic design is still so linear that every objective must be fulfilled in a pre-set order.

Even given these faults (which, it should be said, are pretty common amongst all CRPGs), *Phantasy Star III: Generations of Doom* is a rewarding epic tale which should be told on every Genesis system. **Rumor:** For those who do not keep up with the video game world, note that a fourth *Phantasy Star* adventure is reported to be under development for release coinciding with the U.S. debut of the Genesis CD-ROM in 1992. **cgw**

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Over There

Compaction, Disk Action, Attraction

by Paul Rigby



CDTV Sprirt of Excalibur



CDTV North Polar Expedition

The CDTV version of **Virgin Mastertronic**'s *Spirit of Excalibur* is a derivative of the Amiga computer version. UK executive Steve Clark commented, "It seemed a particularly good product to convert because, in many ways, it is like an interactive film." Where dialogue was handled via text in the Amiga version, the CDTV version has CD-quality music and speech. All of the dialogue was spoken by actors, who produced about 55 minutes' worth of actual sound bites for the game. This total was then cut into snippets and spread throughout the entire game. The basic theme, length and graphics of the game are all the same as the Amiga version. Although the graphics are in the pleasing 32-color mode, there has been no attempt to introduce photo-realistic screens. According to Clark, "There are some CDTV products that were very good on the Amiga. If it is already a good game, one doesn't necessarily have to take advantage of all of the space on the disk."

One happy circumstance with *Spirit of Excalibur*, however, is that while there were many images that would not fit onto the available floppy disks for the original Amiga game, these sequences and images have been included in the CDTV version. Now one will find, for the first time, an uncut version of *Spirit of Excalibur*.

A major difference in the game is the interface, however. Where one used keypad buttons to fly quickly to specific icons in the Amiga version, the CDTV version is more reliant on cursor movement. Fortunately, commands like 'P' for Pause can be replaced by the "Pause" button on the controller.

Another **Virgin Mastertronic** product for CDTV is *North Polar Expedition*. Based upon a real-life expedition undertaken by Sir Ranulph Fiennes during the early '80s, it uses actual video footage of the trek. This 'game' can best be described as an educational CRPG with man-management overtones that can be played for purposes of either enjoyment or education. The player attempts to insure that the expedition will succeed. Problems have to be dealt with or the whole project will fail. The designers used a lot of images from the film, as well as the audio track of the film. Most of that was originated way back in the early '80s when Sir Ranulph Fiennes had completed his TransGlobe expedition.

Virgin Mastertronic actually produced a Laservision version of *North Polar Expedition* about three or four years ago and has recently completed a CD-ROM version for the PC market.

Barney the Bear is the hero in a new educational CDTV program from the **Multimedia Corporation**, an associated company of the BBC. In his first animated adventure (specifically aimed at children 3 to 8 years old), *A Bun for Barney*, Barney discovers that the world is full of bounders ready to rip off the cherries on his iced bun. Just what is the world coming to when a chap cannot eat his bun in peace and quiet? **Multimedia Corporation** describes Barney as, "...a small, cuddly, can't-say-no bear." This reviewer can't help but agree! Barney walks through the "pop-up" world which not only follows the central plot of the quickly disappearing cherries, but intro-

duces a number of sidelines to amuse and interest any participating toddler or computer journalist. The main game contains a number of word and number games, hidden nursery rhymes and so on. All of these are accessed via clicking on a passing balloon or other suitable "switch." Once the sub-game has been triggered, it fills the screen and suspends the story. One must then solve the game/puzzle. Digitized voices and animations are used to reward correct answers. After the sub-game is finished, one can return to the story and proceed from whence one left off. **Multimedia** has spent a lot of thought, time and money on the project, perhaps most notably employing Tom Baker (one of the most beloved actors to ever play the part of television's *Doctor Who*) as a voice talent. The company even spent considerable resources in searching for the best "font" for teaching purposes.

Infogrames has recently released the CDTV version of *SimCity*. At the time of writing, the finished version was 'in the post,' so this news item reflects the impressions experienced from the preproduction copy. This particular version looked good and fairly whizzed along, scrolling at turbo rates. Reports popped up in a flash. The game has been redesigned and enhanced. For example, the extra architecture disks (sold separately for the computer version) are all on the same CD. In addition, the reports have been improved and now take up the entire screen. The interface has also been enhanced to take advantage of the control pad bundled with the CDTV. The CDTV version should be well-received — as long as the awful pseudo-French heavy-metal music playing in the background is dispensed with. This music grated on the ol' nerves at the *best* of times. It just didn't fit the cerebral atmosphere of *SimCity* at all.

Finally, any flight simulation buffs waiting for a mission-based simulation of the Tornado can now look forward to the new game from **Digital Integration**, the company who produced *F-16 Combat Pilot* (all 16-bit formats) for **Electronic Arts**. Others who are looking for a Tornado simulation in the flight simulator mode need look no further than *Pro-Flight* from **HiSoft** (Amiga and ST). We will offer more details in a future issue.

Incidentally, anyone who would like to contact Paul Rigby directly can do so on **CompuServe** (75300,1503) or by mail to 20 Malvern Road, Liverpool, England, L6 6BW [please include and SAE if you would like a reply].

Note: The above games, and any of the other games mentioned in "Over There" in past issues, can be obtained from:

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Miles Better Software, 219/221 Cannock Road, Chadsmoor, Cannock, Staffordshire, England, WS11 2DD. Telephone: 01144-543-466-577/8/80, Fax: 01144-543-466-579.

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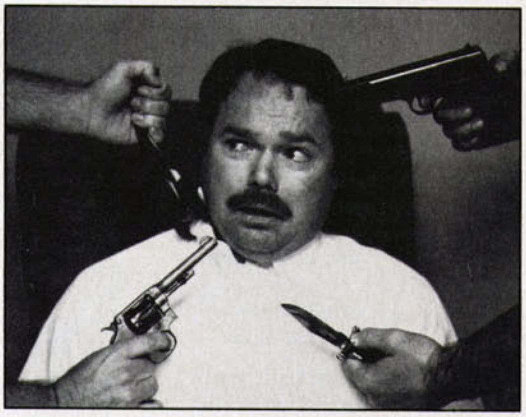
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Opening Our Picture Album

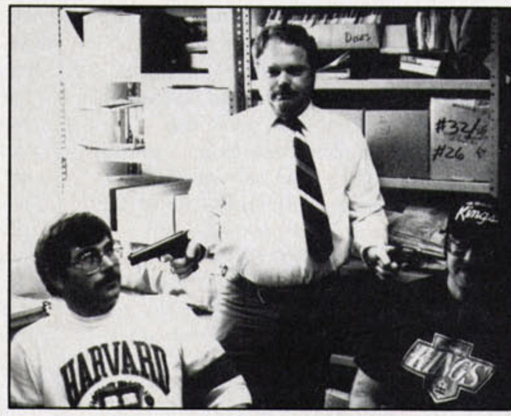
On these two pages, *CGW* readers will get an intimate look at some of the pictures we keep on file to remind us of humorous anecdotes, strange experiences and less complicated days (of old?). Join with us, now, in exploring those daze of yesteryear.

The Renewal Campaign

Many readers received this renewal notice in 1987-1988. The hyperbolic use of black humor was designed to particularly appeal to the *CGW* reader. As it turned out, the renewal campaign was so successful that it spawned the following aftermath where (then) Editor Sipe turned the table on his tormentors.



ReSubscRibe or THE EDITOR GETS IT!





Renewal Campaign: The Next Generation

With Publisher Sipe in his mourning clothes and Editor Wilson in his clerical robe, it only seemed right for Art Defector (Director) DeNardo to show up *sans* shirt. As the triumvirate looked into the nearly-departed reader's coffin, the copy read, "The staff of *CGW* regrets to inform you that your subscription to *Computer Gaming World* is about to expire. However, if you act soon, there is reason to believe that you can fully recover! Please call: 1-800-827-4450 and tell them: 'I'm not quite dead yet! Please RENEW my subscription...'"

The renewal campaign that threatened to make our readers "expire" was even more successful than threatening to "off" our editor-in-chief. Our favorite response came from Mitch. He wrote, "Just a quick note:

- Really liked the postcard
- I do feel better
- Keep up the good work."

Fantastic Voyages

One interesting part of covering the world of computer games is visiting the publishers. We don't always arrive at the most propitious times, however. Witness the visit to **New World Computing** where they hadn't even moved all the furniture into their new "digs." So, (then) New World financial whiz Ron Spitzer explained to (then) *CGW* assistant editor Johnny Wilson what their (then) Kafkaesque office space was going to look like. Murphy's Law reigned supreme on that day, since **New World** game designer Jon van Caneghem had car trouble on the day *CGW* visited and was unable tophoto. No problem—his creative staff managed to substitute a pre-Eddie Murphy Gumby for the famed designer.

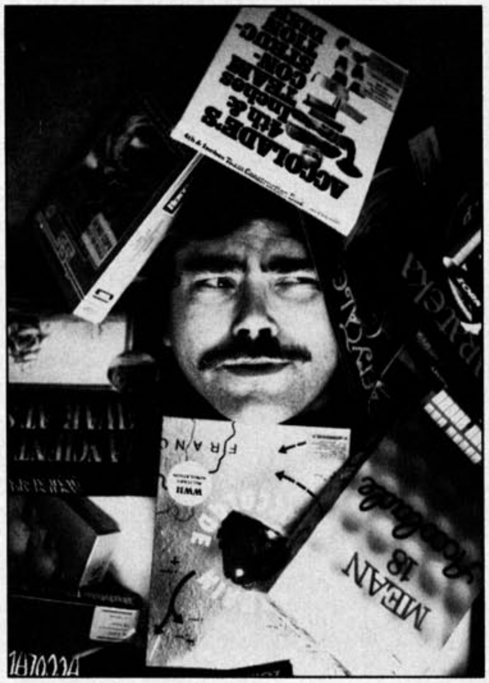
Of course, one never knows what might be found at a computer game company. We particularly enjoyed a trip to **Virgin Mastertronic** where a door in their complex was declared non-existent: *Non cogito ergo non sum* (?).

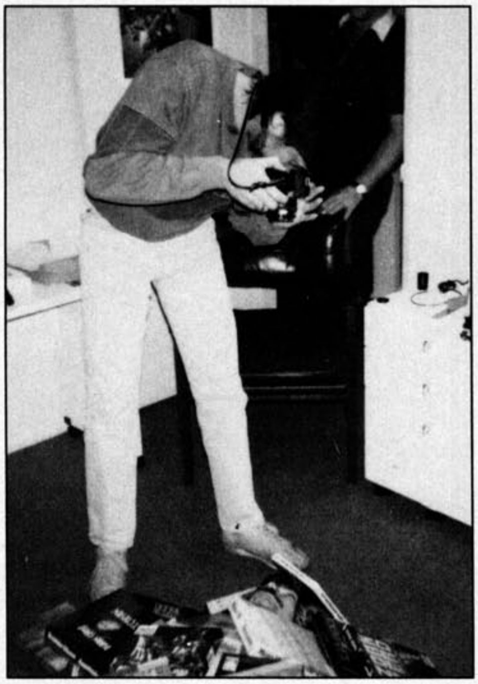


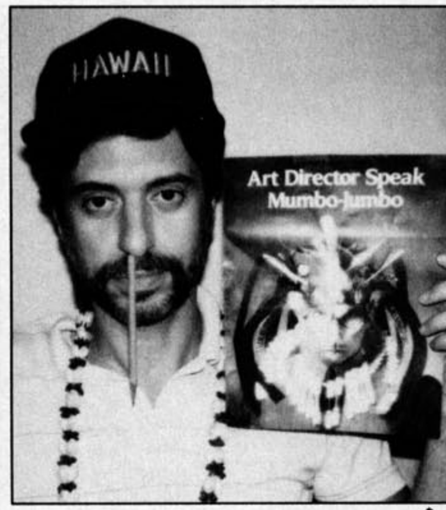


Conversions Achieved

During a redesign of *CGW*, the editors wanted a new piece of art to call the readers' attention to the "Conversions Received" column. When one of the editors went to pick up a conversion and an entire pile of games fell off the shelf, Vince DeNardo threatened to "bury" the editor in a pile of conversions. He ordered Wilson to lie on the floor of the office, stacked the boxes on top of the humiliated editor and, as a result, the pathetic physiognomy of the editor has appeared with unfortunate frequency in the pages of the magazine.







Art Defector

That the editorial departments of magazines and art departments of the same magazines are known to have widely differentiated perceptions of the same issue is a matter of course. After one such disagreement at *CGW*, Editor Sipe found a marvelous ad that read "Art Director Speak Mumbo-Jumbo." Rather than be offended, (then) Art Director DeNardo dressed up like the witch doctor in the ad.

Samurai Editor

Of course, all the letters we get aren't quite so positive (especially those about the Rumor Guy). So, one day, the staff acted out the "execution" our editor so richly deserved. After all, our "thin-skinned" editor vacillates between threatening homicide and "hari-kari" when he gets these letters and it's better to lose him than it would be to lose circulation.



Horsing Around at CES

The editors always get to see interesting sights at CES. Here, Editor Wilson inserts his business card in the slot of a **Blaupunkt** girl's larger-than-life "remote control." Accusing Wilson of trying to win the **Blaupunkt** girl in a lottery of lechery, Publisher Sipe keeps this photo on file in case Wilson's wife and family need to know how he behaves at trade shows.

Now-defunct **First Row Software** brought the original set of television's *The Honeymooners* to CES. After paying a considerable amount in insurance costs to transport the exhibit from its current location at the Museum of Broadcasting, *The Honeymooners* computer game failed to earn back its expenses. Here, Wilson and Sipe try to out-Gleason and Carney the original stars. **CGW**





Spaced-Out and Jammin'

A Sneak Preview of Sega's Toejam and Earl

by Wyatt Lee



As one who has never quite understood the appeal of **Nintendo**'s "Mario Brothers" and being the last person to ever consider buying a **Sega Genesis** just to get **Sega**'s alleged *Mario*-killer, *Sonic the Hedgehog*, who would have ever believed that this videogame-phobe could possibly get "hooked" on an action game that is in any way similar to the two games just mentioned. Yet Greg Johnson insisted that this sufferer from action-avoidance syndrome take the time to look at *Toejam and Earl* and, since this fugitive from funk has always admired Greg's brilliant alien races from *Starflight*, the refugee from the realm of rad decided to take Johnson up on his offer. *Toejam and Earl* is an action/exploration game for one or two players, complete with psychedelic palette and funkadelic soundtrack.

What one discovers, when a game of *Toejam and Earl* is initiated, is that action games do not *have* to be linear mazes. Each playing of *Toejam and Earl* is different, because Johnson uses the *Genesis*' processor to generate random maps for each level rather than static screens to be mastered by rote. This means that players move the title characters over unexplored territory and fill in a map of each level as they travel. There are even "hidden" plots of ground that are exposed as a player's on-screen personae touch the appropriate edges of the visible terrain.

It is also different because the player's goal is not simply to rescue someone or reach the end of the series of levels. Rather, the player(s) must try to locate the ten different spaceship pieces from the characters' damaged spaceship and assemble them in any order (since one finds them in a random order) so that the characters can move on. This means that the immediate goal is to find the missing spaceship piece on a given level (if the game says that a missing piece happens to be located on that level) or to find the elevator to the next level (once the missing ship piece is located, or as fast as possible when there is no ship piece, in order to reach a level where one might be).

What *is* similar to the worlds of "Mario" and "Sonic" is the fact that one's character finds hidden surprises on every level which can assist the player in his/her quest. In *Toejam and Earl*, the on-screen characters open "presents" that allow them to run faster (super hi-tops), jump higher (spring shoes) and fly (wings). Each "present" has a distinctive shape and packaging, so once the player has opened that type of package, he/she can know the best use of such a package in the future.

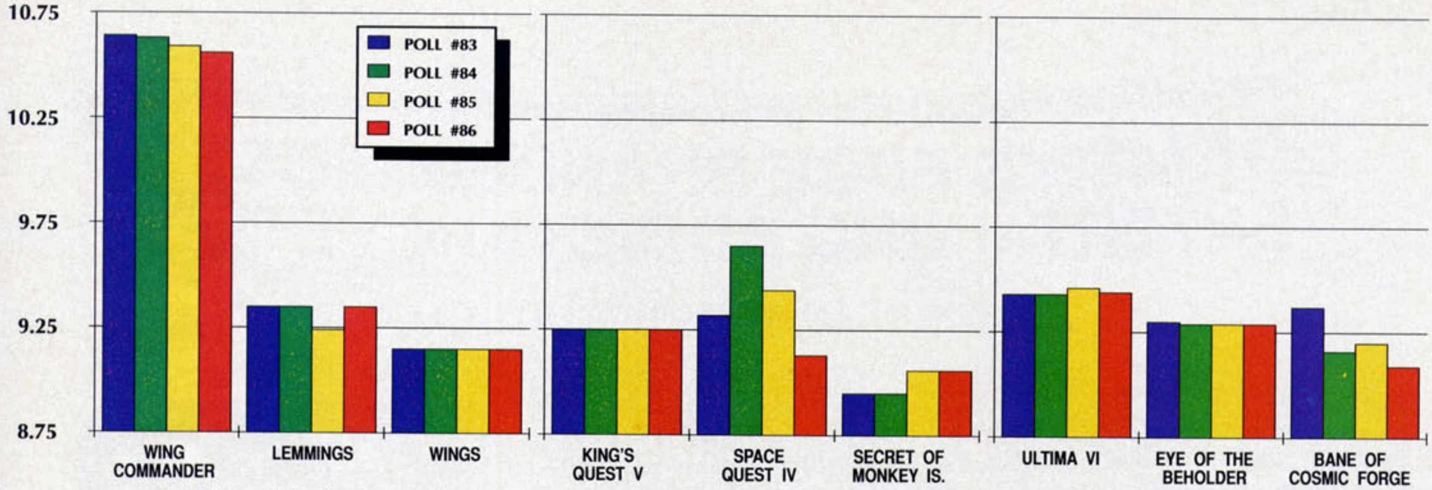
What is also similar to the worlds of "Mario" and "Sonic" is the fact that one's character does not really "attack" any of the cast of characters which serve to foil the title character's advancement in the game. Rather, the basic nature of the game is to avoid the strange obstacles placed in a given character's path. In *Toejam and Earl*, Johnson has populated his world with a bogey man (who scares lives out of the good guys), a mad doctor (who seems to get as much joy out of using a hypodermic needle on the characters as Steve Martin's dentist character enjoyed drilling his patients in *Little Shop of Horrors*), giant hamsters (who travel about in glass globes and flatten any heroes who manage to get too close), stupid cupids (who launch their arrows at the good guys and cause them to respond erratically to the game's controls), little old ladies in shopping carts (who try to mow down the player characters) and many more. In short, the barriers to player success are hilarious.

Indeed, this writer can testify to the fact that the game is entertaining, having observed first-hand a wide assortment of children gathered around his **Sega Genesis** while the EPROM for *Toejam and Earl* was "residing" at his home. Two children would be playing the game and anywhere from three to five others would be cheering them on and laughing uproariously as they met up with the dangerous denizens of Johnson's fecund imagination.

The truth is, this writer was never interested in the traditional "Mario" or "Sonic" type of videogame. Now, he finds himself muscling in on an entire neighborhood of kids, just to hear Earl say, "Wassup?" To paraphrase a bath soap commercial of a decade ago, "Kids like it, aye, but *I* like it, too!" **CGW**

Circle Reader Service #72

TOP THREE ACTION — TOP THREE ADVENTURES — TOP THREE ROLE PLAYING



Action/Arcade (AC): Computer games that emphasize hand-eye coordination and reflexes.

Adventure (AD): Games that allow you to take an alter ego through a storyline or series of events.

Role-Playing Adventure (RP): Adventure games that are based on character development (usually involving attributes).

Top Ten Games

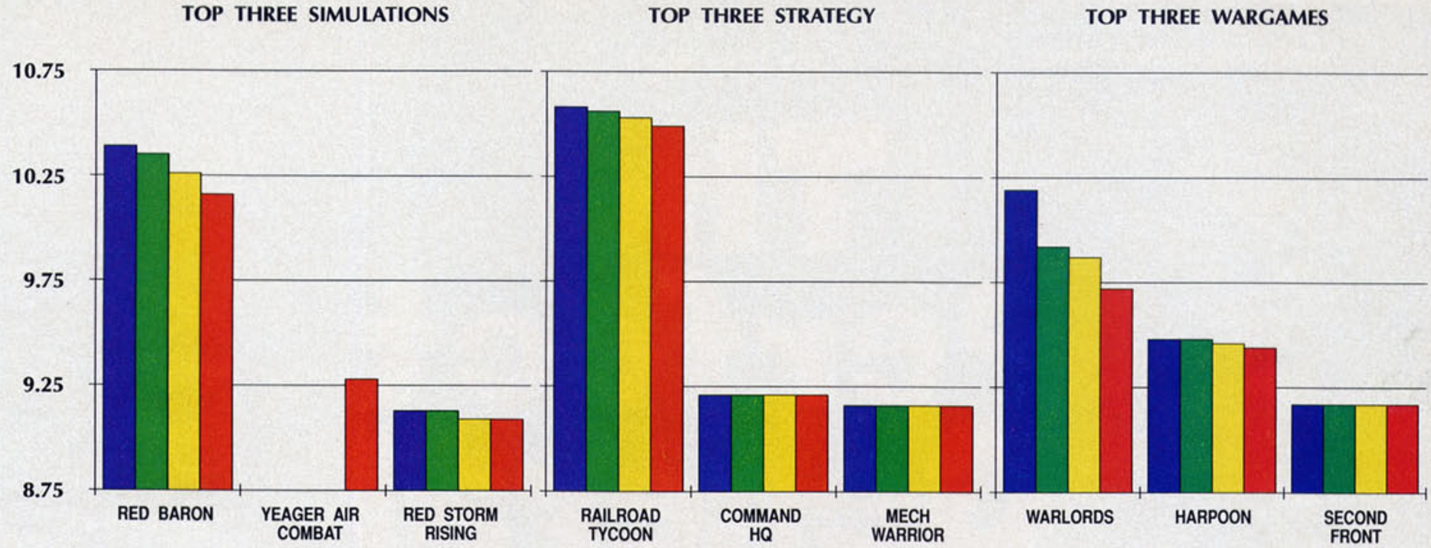
Game Title, Rating
Source, Category, Average Responses

1	**Wing Commander** Origin	AC	101	**10.56**
2	**Railroad Tycoon** MicroProse	ST	87	**10.49**
3	**Red Baron** Dynamix	SI	78	**10.16**
4	**Warlords** SSG	WG,ST	61	**9.72**
5	**Harpoon** Three-Sixty	WG	79	**9.44**
	Ultima VI Origin	RP	75	**9.44**
7	**Lemmings** Psygnosis	AC	39	**9.35**
8	**Eye of the Beholder** SSI	RP	73	**9.29**
9	**Yeager Air Combat** Electronic Arts	SI	58	**9.28**
10	**King's Quest V** Sierra	AD	51	**9.25**

The CGW

No.	Name	Source	Category	Avg. # Resp.	Rating
11.	Command HQ	MicroPlay	ST	53	9.21
12.	Second Front	SSI	WG	38	9.17
13.	Mech Warrior	Activision	ST	54	9.16
14.	Wings	Cinemaware	AC	33	9.15
15.	Space Quest IV	Sierra	AD	46	9.13
16.	Quest for Glory II	Sierra	AD,RP	28	9.10
18.	Red Storm Rising	MicroProse	SI	73	9.09
	Bane of the Cosmic Forge	Sir-Tech	RP	55	9.09
19.	Silent Service II	MicroProse	SI	62	9.08
20.	The Secret of Monkey Island	LucasArts	AD	33	9.06
21.	Battlehawks 1942	LucasFilm	AC,SI	86	9.05
22.	Ultima V	Origin	RP	91	9.01
23.	Quest for Glory	Sierra	RP	57	9.00
	Lords of Rising Sun	Cinemaware	AC,ST	48	9.00
25.	Space Quest III	Sierra	AD	34	8.97
	Sword of Aragon	SSI	WG,ST	45	8.97
27.	Populous	Electronic Arts	ST	114	8.96
	Romance of the 3 Kingdoms	Koei	ST,RP	31	8.96
29.	Wasteland	Electronic Arts	RP	117	8.95
30.	Overrun	SSI	WG	24	8.93
31.	Falcon	Spectrum Holobyte	SI	62	8.90
32.	Dragon Wars	Interplay	RP	30	8.87
	NFL Challenge	XOR Corporation	ST	86	8.87
	Indianapolis 500	EA	SI	32	8.87
35.	Elvira	Accolade	RP	31	8.82
36.	Power Monger	Electronic Arts	ST	45	8.81
	Might & Magic II	NewWorld	RP	54	8.81
38.	The Magic Candle	Mindcraft	RP	43	8.80
	LHX Attack Chopper	EA	AC	25	8.80
40.	Project Stealth Ftr	MicroProse	SI	29	8.79
41.	Bard's Tale III	EA	RP	54	8.77
42.	Airborne Ranger	MicroProse	AC	74	8.76
43.	Bandit Kings	Koei	ST,RP	28	8.75
44.	Covert Action	Microprose	AD	30	8.73
	Jack Nicklaus Unlimited Golf	Accolade	ST	26	8.73
46.	Battles of Napoleon	SSI	WG	30	8.72
	Battlechess	Interplay	ST	62	8.72
48.	Action Stations	RAW Entertainment	WG	22	8.71
	Breach 2	Omnitrend	ST,RP	29	8.71
	Starflight II	Electronic Arts	RP	63	8.71
51.	Neuromancer	Interplay	AD	33	8.70
52.	F-15 Strike Eagle II	MicroProse	SI	58	8.69
53.	Typhoon of Steel	SSI	WG	43	8.67
	Curse of the Azure Bonds	SSI	RP	70	8.67
55.	Rise of the Dragon	Dynamix/Sierra	AD	42	8.66

Games are often listed in more than one category. In this case, the first listed category is considered primary. In order



Strategy (ST):
Games that emphasize strategic planning and problem-solving.

Simulation (SI):
Games based on first-person perspectives of real-world environments.

Wargames (WG):
Simulations of historical or futuristic warfare from a command perspective.

Poll

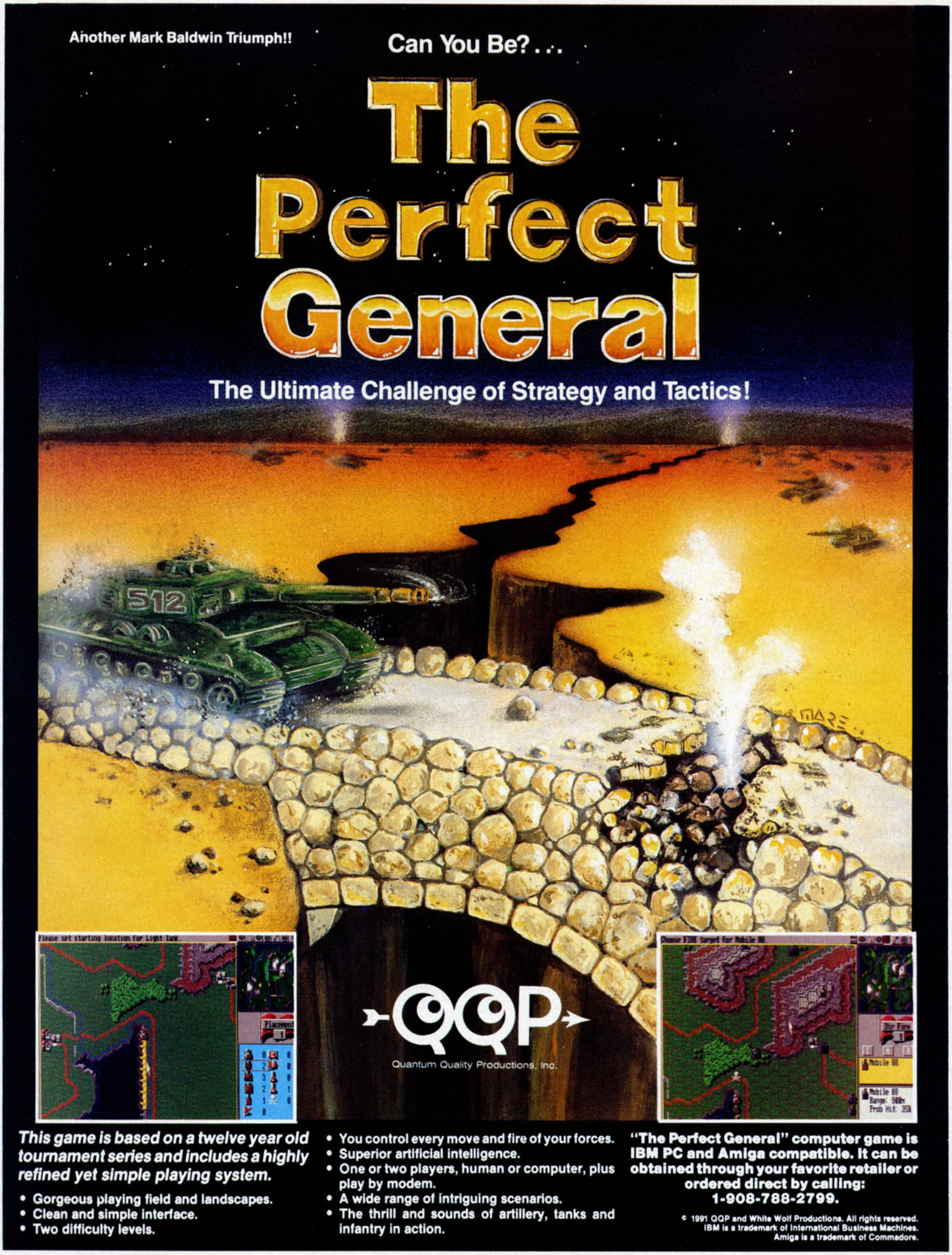
No.	Name	Source	Category	Avg. # Resp.	Rating
56.	Indiana Jones/Graphic Adventure	Lucasfilm	AD	29	8.65
	Ballistyx	Psygnosis	AC	20	8.65
58.	Wayne Gretzky Hockey	Bethesda	AC,ST	36	8.62
59.	Pool of Radiance	SSI	RP	116	8.61
60.	King's Quest IV	Sierra	AD	58	8.59
61.	Buck Rogers	SSI	RP	39	8.57
62.	Chessmaster 2100	Software Toolworks	ST	42	8.56
63.	Genghis Khan	Koei	ST,RP	34	8.54
64.	Future Wars	Interplay	AD	24	8.53
65.	Panzer Strike	SSI	WG	68	8.51
	Champions of Krynn	SSI	RP	65	8.51
	Leisure Suit III	Sierra	AD	56	8.51
	Sword of the Samurai	MicropProse	ST,RP	40	8.51
69.	Savage Empire	Origin	RP	37	8.48
70.	Manhunter 2	Sierra	AD	31	8.42
71.	Nobunaga's Ambition II	Koei	ST,RP	20	8.40
72.	Heart of China	Dynamix	AD	30	8.40
73.	TV Sports Football	Cinemaware	AC,ST	50	8.39
	Secret of the Silver Blades	SSI	RP	47	8.39
75.	Wings of Fury	Broderbund	AC	52	8.38
76.	Strike Fleet	Electronic Arts	WG	79	8.37
77.	Flight Simulator 4.0	Microsoft	SI	43	8.36
78.	Fire Brigade	Panther	WG	30	8.34
79.	BattleTech II: Revenge	Infocom	WG,RP	42	8.33
80.	Rocket Ranger	Cinemaware	AC,AD	75	8.32
81.	Nobunaga's Ambition	Koei	ST,RP	20	8.30
82.	Drakkhen	Data East	RP	32	8.27
	688 Attack Sub	EA	SI,ST	59	8.27
84.	Lord of the Rings	Interplay	RP	31	8.26
85.	Manhunter	Sierra	AD	72	8.25
86.	Centurion	EA	ST	49	8.24
87.	Police Quest	Sierra	AD	98	8.23
88.	Starglider II	MicroPlay	AC,SI	65	8.22
89.	Jack Nickluas Greatest 18 Holes	Accolade	ST	32	8.21
	Three Stooges	Cinemaware	AC	68	8.21
91.	Ishido	Accolade	ST	27	8.20
	Search for the King	Accolade	AD	20	8.20
	Leisure Suit Larry II	Sierra	AD	61	8.20
94.	Loom	LucasArts	AD	38	8.18
95.	Abrams Battle Tank	EA	SI	31	8.16
96.	The Colonel's Bequest	Sierra	AD	28	8.14
96.	Tetris	Spectrum Holobyte	AC	46	8.13
	BattleChess II: Chinese Chess	Interplay	ST	21	8.13
	Full Metal Planet	Data East	ST	32	8.13
100.	Conquest of Camelot	Sierra	AD	33	8.12

Hall of Fame

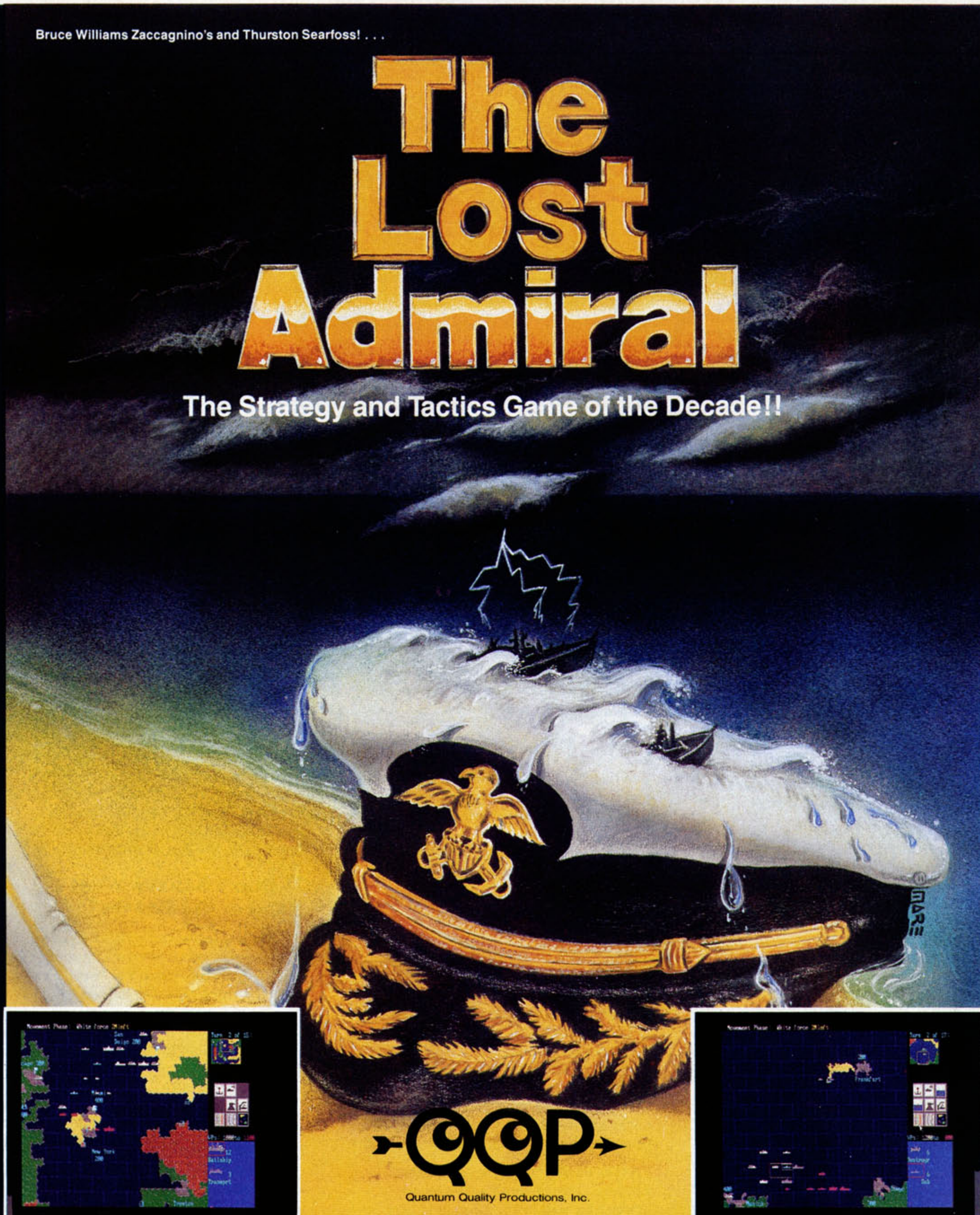
The Games in CGW's Hall of Fame Have Been Highly Rated by our Readers over Time. They are Worthy of Play by All.

Bard's Tale I
Chessmaster
Dungeon Master
Earl Weaver Baseball
Empire
F19 Stealth Fighter
Gettysburg
Gunship
Kampfgruppe
M-1 Tank Platoon
Mech Brigade
Might & Magic
M.U.L.E.
Pirates
SimCity
Starflight
Their Finest Hour
Ultima III
Ultima IV
War in Russia
Wizardry

to be recognized as the "Top Game" in a given category, a game must be listed as being primarily of that specific type.



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The Perfect General
The Ultimate Challenge of Strategy and Tactics!
512
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• Two difficulty levels.
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• One or two players, human or computer, plus play by modem.
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• The thrill and sounds of artillery, tanks and infantry in action.
"The Perfect General" computer game is IBM PC and Amiga compatible. It can be obtained through your favorite retailer or ordered direct by calling:
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Warning: Although "The Scorpion's Tale" takes place in a warm and comfortable tavern of the mind, complete with a nice, cozy fire of vibrant images, our resident storyteller conjures up illuminating hints about games. **If the gentle reader eschews hints, let him beware!**



Scorpion's Tale

Strategic Simulations' Gateway to the Savage Frontier

As told by Scorpia

Ah, summer's over, and none too soon. This last one was pretty hot, and also pretty dry as far as games were concerned. Even Fred started to grumble a bit (something about "scorpions being underfoot all the time instead of in front of computer screens where they belong"). Can't imagine why, although he did sound a bit savage at times. Speaking of savage...

Gateway to the Savage Frontier is the first in a new gold box series from **SSI**. One need only say "gold box game" to conjure up an idea of what to expect and that idea would be pretty accurate. *Gateway* is a typical *AD&D* product. It's been tweaked a little here and there and the VGA graphics are a little better, but overall you've played this before in previous games.

The main thing is that your characters (the usual mix of races and professions) start off at level one or two, depending on whether they are single class or multi-class. This can be tough after years of playing with more advanced characters. We tend to forget how difficult it is down there at the bottom, where the player characters have trouble hitting the broad side of a barn in full daylight.

The reverse of that is characters who are so powerful nothing can stop 'em, which is why **SSI** is introducing a new series. The one that began with *Pool of Radiance* and ended with *Pools of Darkness* brought characters up to such heights of power that there was nowhere further for them to go. So, you're starting over again in *Gateway*. It does tend to give you that "deja vu" feeling.

"Paranoia Strikes Deep in the Heartland"

Anyway, this time around you're out to stop a massive invasion by Zhentil Keep and friends. This requires finding four special statuettes and using them at a special place in the abandoned town of Ascore. Much of the game is, thus, a search-and-gather operation with plenty of enemies to kill in between.

One nice feature added is being able to see the special items after you've acquired them. Veteran players will recall that in *Curse of the Azure Bonds*, once you picked up a special item (which couldn't be used directly by the party), you never saw it again, even though you did have it with you. After awhile, you might forget just what you had or hadn't picked up, and there was no quick way to check on it. That's been changed. In *Gateway*, every time you camp out, the camp screen displays items you've obtained to that point. No more guesswork!

As far as your party is concerned, whatever mix of races and classes worked for you in previous gold box games will do the job here. I went with my standard group of three Elven Fighter/Magic Users, one Dwarf Fighter/Thief, a Human Paladin and a Human Cleric. These last two came in especially handy for turning undead (especially in Ascore; watch out for the mummies there, since they are particularly nasty and should be dispensed with first!).

Since this is the first of a series, level advancement is somewhat limited, especially for spellcasters. Clerics and mages will only get up to sixth level. Rangers can make it to seventh. Paladins, Fighters, and Thieves rise the most, all the way up to eighth level. Be sure to check the charts in the back of the Adventurer's Journal so you know what to expect.

"I Don't Believe What I Read in the Papers"

Speaking of the Journal, I can make the pleasant announcement that at long last SSI is finally using the "word lookup" from the front only. No longer will you have to read the game paragraphs before their time. In addition, SSI has added "including the headings" to the look up instructions so you'll be sure to count lines correctly.

They also seem to have dropped that annoying "word lookup" when you save the game. In previous gold box products, you'd be prompted for a word at random times before you could save. Not once did this show up during the two times I went through the game. It wasn't missed (grin).

Another improvement is the ability of spellcasters to automatically re-memorize spells while doing the "Fix" command. This is a great time-saver, and also makes sense: your cleric only has "Cure

Light Wounds" for healing, so fixing up the injured party members takes a while. Why let that time go to waste? Now it doesn't, as spellcasters regain spells while the healing goes on.

"I Ain't Worrying and I Ain't Scurrying"

If no one needs healing, but spells must be renewed, just "Resting" will do the job (provided, of course, you aren't interrupted!). Usually the best place for healing and resting is an inn (standard fee of one platinum for a room). No one ever bothers you there. In other locations, there is always the chance that something unfriendly will happen by to make your situation worse.

Gateway is a little less linear than many gold box games. Although you can follow the trail of the statuettes in sequence, it is also possible to come across them while visiting the various towns and villages. The one danger is that you can run up against opponents who are too strong for you early in the game (remember, your guys are low level at the start!). Take your time and don't go too far afield at the start.

There is a mage (you have to rescue him first) who will give you instructions on where to find the statuettes. Visit him each time you find one and he'll tell you where the next one is to be obtained. You may hesitate to trust anyone named "Amanitas," but he's really a kindly soul and quite honest!

That can't be said for some of the other NPCs in the game. As you go along, there are points where people offer to join your party. Some of them are trustworthy, others aren't. It's up to you to decide whether or not you want them.

Most stay only for a short time, but Krevish (who you meet very early on) will hang out with the party up to the end. He isn't much to look at, and his stats are less than thrilling, but he does have more sense than the usual NPC member. He comes equipped with a bow, and this is his weapon of choice. As long as you keep him well-supplied with arrows, he will happily stay in the rear of the party, pecking away at the opposition. He even hits them sometimes, too (heh).

There is something new with these NPCs: they take their own share of the treasure before it's divvied up. Before the treasure screen is displayed, you see a message that "Krevish takes and hides his own share." They certainly do hide it; this money (or possibly money, gems and jewels) is never shown on the character screen. It's theirs and they make sure you can't get your greedy little paws on it.

Which means if you want Krevish, for instance, to be trained up levels when the time comes, you have to fork over the cash for it. Training *isn't* free. In fact, it's downright expensive, being a thousand gold pieces per level. At the start of the game, this can be a problem. Money is hard to come by; most opponents in the early stages don't carry much with them. You can easily find yourself with the PCs needing to be trained up, but without the necessary cash to do it.

Later, the reverse is true: you have tons of money, gems and jewels, but the need for them isn't so great, since you're reaching the upper levels of advancement, with new levels few and far between.

Unlike many other gold box games, there's nothing much to be found in the wilderness beyond what is shown on the map. All you'll come across on wandering expeditions is wandering monsters. No secret places or interesting locations, at least none that I was ever able to find.

Ditto for the taverns: all you can do there now is fight or leave. You can't even buy a drink and there's no gossip to overhear. Rather makes the taverns a complete waste in the game.

"Exaggerating This and Exaggerating That"

There is an extensive system of rivers in this portion of the world and you can rent boats to reach different towns. Many can also be visited on foot, but often only by taking wide detours. The advantage to renting boats is that, along the way, you are likely to be bothered only by the occasional Ankheg whereas, on foot, you might also be accosted by hill giants, goblins, hobgoblins, wild boars, bugbears or giant snakes. Expect to find trolls in the Trollmoors, as well as a possible basilisk or two. Wyverns could well show up around the edges of the desert. It's a dangerous world out there, so be prepared for it; you can't always run from these random encounters.

Definitely buy everyone in the party a silver mirror. There are some Medusae lurking in certain places, and you know



what that means if you aren't ready for them. Just remember the mirrors have to be "equipped" to be useful!

There aren't too many neat items in the game. About the best armor you'll have is chainmail+1 (although there is one suit of plate+1 you can get) and you'll only find one ring of protection (+2) and a number of bracers AC 4. The best shields are +1 and not easy to come across.

Weaponry is also somewhat limited. Most of what you come across is of the +1 variety, mainly broadswords and light crossbows and a couple of maces. Additionally, there is a regular +2 longsword and +2 battleaxe. In the ruins of Ascore, if you're lucky, you might find the longbow +2, some +2 arrows and the Elven longsword+2 versus Undead (which, despite being Elven, is usable only by Dwarves).

The single best weapon in the game is hard to come by, but worth the effort. If you can get a piece of meteorite, the smith in Neverwinter can forge it into a very nice longsword+3 of Stonecutting. This does double damage against stone critters, such as margoyles (yep, they're baaaack!). I could only find one piece of meteorite, so expect to have only one such sword.

Magical weaponry is very limited. There is a necklace of fireballs, a wand of ice storm and a wand of defoliation (handy for when those shambling mounds shamble in). Save these for the really important fights, as their charges are limited, too.

The most difficult part of the game comes at the end, when you have all the statuettes and you're ready for Ascore. To reach the plaza, you have to fight your way through a maze. This is especially nasty, because it is continuous combat. Once inside, there is no saving, no resting, no renewal of spells.

When the first combat ends, instead of being taken to the usual treasure screen, the party remains in the room. You have to find an exit and maneuver one member of the party through it (one is enough). This requires heavy use of the "Aim" command so you can locate exits without a lot of moving around.

After leaving the room, you get the treasure screen. When you're done with that, the party finds itself in the next combat room. This procedure continues on until you either find the way out of the maze, or you get trashed by the monsters.

The first room has a bunch of goblins, the second an army of goblins, the third a single goblin, the fourth some shambling mounds and ettins, the fifth is occupied by a few mages and fighters, and the last room is the Big Bad Guy himself, along with some mages, fighters and quite a few shambling mounds.

It's best to make a crude map as you go along, so you don't end up travelling in circles. If you enter a room you've been in before, you'll have to fight the same critters that were there before, too, all over again. So make sure you save the game before entering the first room, in case you get into big trouble and find restoring is necessary.

"I'm Just Havin' a Good Time"

The big finale (using the statuettes just as hordes of unfriendly things are approaching from all directions) is actually rather tame. It's all done for you automatically through text paragraphs and some pictures; you just sit there and watch it all. After that, you're brought back automatically to Yartar, the starting town. At that point, you can stop playing or wander around to tie up any loose ends.

Rather astonishingly, the Ascore maze doesn't get turned off after you use the statuettes. If you go back there later, you'll find that the game doesn't seem to know you're done. You can go through the entire maze exactly as before, including the "big finale" (even though you don't have the statuettes by now) and the return to Yartar. That's *really* deja vu!

And that's about it for now, as I see by the old invisible clock on the wall. Remember, if you need help with an adventure game, you can reach me in the following ways:

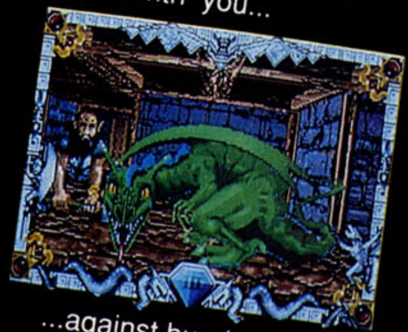
On Delphi: visit the GameSIG (under the Groups and Clubs menu). On GEnie: stop by the Games RoundTable (type: Scorpia to reach the Games RT). By US Mail (enclose a self-addressed, stamped envelope if you live in the United States): Scorpia, PO Box 338, Gracie Station, New York, NY 10028.

Until next time, happy adventuring! **CGW**





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- ★ NOTE: Former experience with previous Might & Magic's *is not required.*

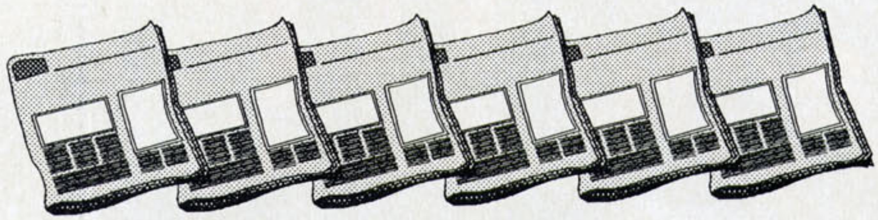
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Stop the Presses!

Davidson's Headline Harry and the Great Paper Race

by Caitlin Ackelson



A chance to chase down breaking news stories as an ace reporter for the fictitious *U.S. Daily Star* is what players age 10 to adult have when they boot up *Headline Harry and the Great Paper Race*, a new learning adventure game from **Davidson**.

TITLE:	Headline Harry and the Great Paper Race
SYSTEM:	IBM
COPY PROTECT:	None
PRICE:	$59.95
DESIGNERS:	Mary Cron, Anne Hertz
PUBLISHER:	Davidson Torrance, CA

Headline Harry is a fiercely ethical journalist whose scrupulous editing of his prestigious national daily newspaper has placed it firmly in *second* place in sales behind that tainted yellow scandal rag, the *Diabolical Daily*. The player's job is to work his or her way up through the journalistic ranks from cub reporter to staff, then senior reporter, all the way up to star reporter. The more stories filed by the reporter-player, the farther one advances, not only one's own career, but the success and stature of the newspaper as well.

The player starts by choosing a geographic region of the United States (South, Mid-Atlantic, New England, Northwest, etc.) to report from, then meeting with Headline Harry in his office and getting an assignment.

Riding the Bus with Rosa Parks

Harry gives the player some introductory information about a potential story that's brewing and instructs him/her where to start. Following direction is important here. For instance, Harry may say something like, "There's a bus boycott happening in the South and it looks like something big might happen. Why don't you go to Georgia and check it out?" At this point the player might think, "Hmm... bus boycott... civil rights... Rosa Parks. That's in Alabama — I'll go there first." Wrong. The first clues and bits of information the player needs are in Georgia, and skipping them to go straight to Alabama (where the serious action is) will leave one with pieces of the puzzle missing. So, lesson one: Do what Harry says.

Looking for Hot Tips and Good Leads

In choosing where to go while reporting on a story, the player must pick out the state of destination on an unmarked map of the U.S. (Ooh, a nasty trick! It's a task that strained this reviewer's knowledge of geography embarrassingly. Where is Georgia, anyway? It took a couple of tries to get it right. But then again, this reviewer has to quietly sing the alphabet song to herself to figure out if "q" comes before "r.") Once in the desired location, the reporter-player taps into all the resources of information





available. One can conduct interviews, clicking on the people in each scene, thereby "asking" them for information. Some of the people are eye-witnesses, some have hearsay information about the events in question. Some of them can be very helpful, some are quite funny. For more fact-finding fun, one can listen to the radio or tape recorder or access reference information by clicking on the corresponding menu icons. The player can even use the phone to call the trusty assistant Lazar, Headline Harry, Dr. Know (a source of hints, both helpful and not) or Mom. (A good tip to remember in life as well as in *Headline Harry*: When all else fails, call Mom.)

To gather facts, the player records key names, dates and events (the all-important who, what, where, when and why) in an on-screen notebook by clicking on the notebook-and-pencil icon. Once all the leads have been followed up and the crucial facts have been accumulated, the story is ready to file. If the player beats his or her smarmy, ruthless competitors to press, then it's on to the next echelon of reporterdom and the next big story.

From Vietnam to Music Video

The stories available for coverage by a reporter-player in *Headline Harry* are drawn from historical and cultural events from 1950 to 1990. Such topics as politics, arts and entertainment, sports and science are touched on and while previous knowledge of the events can help, it is by no means required. Subjects range from serious world events (wars, presidents and Supreme Court decisions) to whimsical cultural trends (Elvis, mood rings and hit TV shows). While covering a story, the reporter-player must sort through all of the information, follow the strongest, most accurate leads and compile the story before the treacherous, unscrupulous, lying scum at the *Diabolical Daily* have a chance to publish their inaccurate, sensationalized version of the same story.

All the News That's Fit to Learn

The educational material players are exposed to in *Headline Harry and the Great Paper Race* is not only broad-ranging newspaper-style lessons in recent U.S. history, but fact-finding and problem-solving skills, too. Players must use that most elusive of qualities, critical thinking, to sift through the facts, decide what's important and applicable to the story at hand, and leave the rest. In addition, if players can't find Georgia on a U.S. map, they'll learn.

Extra, Extra

The documentation for *Headline Harry* is clear and helpful. The instruction book is done as a newspaper-style reporter's manual, complete with sections titled "Feature Story," "Editorial," "Dear Gabby" and "Classified." This approach to how-to may better keep the interest of younger, less experienced players who might otherwise get bogged down in page after page of dry instructional text before they even get to boot the game.

Sound and graphics are fully up to par to hold the attention and suspend the disbelief. The full-spectrum 256-color edition of *Headline Harry* requires 640K and supports MCGA and VGA displays. Hard disk installation is required, MS/PC DOS 2.1 or Tandy DOS 2.11.24 or higher, and a minimum of 8 MHz is suggested. The program optionally supports the AdLib, SoundBlaster, Tandy and PS/1 sound devices, as well as a printer and mouse. No hardware is needed for digitized speech on a machine with 10 MHz AT or higher. Both 5.25-inch HD (1.2Mb) and 3.5-inch 720K disks are included in the box. Also available are a 16-color version and a 16-color, two-program Teacher's Edition with a five-program Lab Pack.

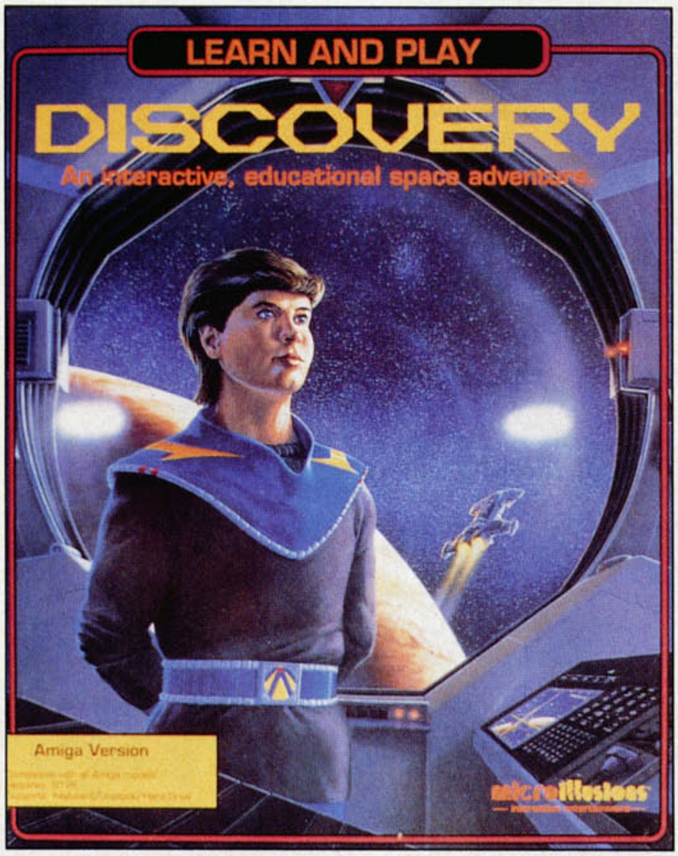
The Computer Game of Record

Headline Harry is a newsworthy "scoop" in educational software. Funny and compelling, it gives kids a reporter's-eye view of U.S. history. With its treasure-hunt approach to learning and adventure game format, the game provides an entertaining approach to U.S. political and cultural history and the fast-paced, superglamorous world of journalism. CGW

In Games, No One Can Hear You Scream

MicroIllusions' Discovery 2.0

by Leah Wesolowski





TITLE:	Discovery 2.0
SYSTEM:	Amiga
# PLAYERS:	1
COPY PROTECT:	None
PRICE:	$ 39.95
DEVELOPER:	Sylvan Technical Arts
PUBLISHER:	MicroIllusions

Imagine a game in which the plot of *Aliens* is reversed. Instead of seeking the dangerous life-form in order to reduce all of its living entities into fried interplanetary viscera, the protagonist is frantically trying to round up fuel crystals in order to transport a modern "Noah's Ark" of dangerous xenoforms to a wildlife refuge. So much for conservation and so much for the premise underlying *Discovery 2.0*, an interactive educational space adventure game which boasts playability levels for children grades K through 12. The game *is* interactive and it *is* educational, but its playability is right up there with solo *Tic Tac Toe*.

Frustration 101

Players move their on-screen characters through a space ship in order to gather fuel crystals and save the alien creatures. Occasionally, the movement of the characters is halted and a question must be answered or a problem must be solved before further movement is possible. Unfortunately, character movement within the framework of the game is clumsy at best. When this reviewer became frustrated at the bothersome experience of having her characters fall down hatches, even though they were ostensibly equipped with ladders, a thirteen-year-old neighbor was brought into the equation. It was hoped that younger reflexes and video game experience would lend some assistance in avoiding the unwelcome experience of having to work one's way back up the levels the character fell past. (At least characters don't die, no matter how many levels they fall!) Even the teenager had trouble manipulating the characters.

Once the player locates those fuel crystals, the next problem occurs. The crystals are, more often than not, guarded by the very aliens the player is trying to save. Unfortunately, these creatures, resembling octopi, amoebae and spiders, can be deadly if the player comes in contact with one of them. It seems a frivolous task to bring such dangerous critters back to wildlife parks, maybe akin to putting a great white shark in a tank with tropical fish! Nevertheless, one wonders how a kindergartner can be expected to manipulate characters past such deadly creatures without experiencing undue frustration when experienced gamers have trouble accomplishing this task.

Can You Say ED-U-K-SHUN?

Remember, however, that the educational portion of the game is for players to answer questions. Hence, the player's character regularly encounters closed doors. To gain access to the room beyond the door, the player must spell a word correctly or solve a math problem. The computer says, for example, "Spell 'Beneboly'" and, no matter how many times this reviewer has the word repeated, there is no way of knowing that the required word was 'Inevitably.' So, the computer replies "Not guite, the Kor-reckt spel-ling iz...." This reviewer now feels as if there really may be a place in this world for Mr. Rogers. He could spend a few hours teaching Amigas how to talk!

Further, the methods employed to solve the math problems are preposterous! Take this example of a simple addition problem:

$$\begin{array}{r} 234 \\ \underline{+234} \end{array}$$

If the player simply enters "468," the discordant computer voice says, "That iz in-Kor-rect..." and goes on to show the player that the only correct way to solve problems of this nature is to carry the zeros:

$$\begin{array}{r} {\scriptstyle 0\,0} \\ 234 \\ \underline{+234} \\ 468 \end{array}$$

Subtraction is a different matter altogether. When borrowing from a number, the player must hit the 'B' key, which moves the cursor to the position left of the column being worked upon. (If that value is zero, the player must hit the 'B' key twice to get to the proper position.) The new value of the number being borrowed from must be entered before proceeding to the solution. While this may be good for large problems it is a hindrance with simple subtraction such as:

$$\begin{array}{r} {\scriptstyle 1} \\ 20 \\ \underline{-11} \\ 9 \end{array}$$

To add insult to injury, there is no way to correct the error if the player enters an incorrect figure and immediately realizes it. Therefore, the player again has the displeasure of hearing, "Not gu-ite..."

Lessons Learned

Can a child learn something by playing *Discovery 2.0*?

"Not gu-ite...." As early as the original *Discovery*, reviewers thought the concept was good, but the implementation was poor. Nothing has really changed. With a new digitized voice, the ability to correct mathematical errors and a movement system in which characters didn't continually fall down hatches (easier than characters fall down ladders in *Shadow of the Beast*), the game might be worthwhile. As it is, *Discovery 2.0* is only likely to make one scream. CGW

Circle Reader Service #54 >>



Actual IBM EGA screen photos
In *The Magic Candle,* 1989's role-playing game of the year, you saved the lands of Deruvia from the foul archdemon Dreax! But that triumph is past!
Now the Candle Burns at the Other End!
The Magic Candle II
THE FOUR AND FORTY
At the other end of the world, far across the Sea of Oshmar, lies the dire continent of Gurtex, where the Children of Light are preparing a campaign against the growing Forces of Darkness.
But the vile leaders of Darkness have trapped the lost guardians of the Magic Candle in evil candles of their own!
New magic! New monsters! New skills! Old friends and enemies, from brave Rexor and wise Ziyx to the Mad Wizard and the Ogre King!
Automatic maps! Automatic combat! You can even turn combat leadership over to one of your trusted companions!
Best of all, automatic note-taking! The computer keeps track of your conversations and discoveries. You can print them out, save them to disk, and search through them to remember exactly what that little halfling said.
King Rebnard needs your help again! Dozens of other non-player characters wait to join your quest! Will you make the journey to Gurtex? Will you learn the secret of the Four and Forty?
MINDCRAFT
2341 205th Street, Suite 102
Torrance, CA 90501
To order, see your retailer or call Electronic Arts Distribution at (800) 245-4525.



A panoramic first-person view awaits your return to town.



Realistic 3-D dungeon mazes challenge your skill.



Vast hordes of hideous creatures lurk in the darkness.

There's nothing li
to put the real wo

Shining in the Darkness™ from Sega™ Genesis™ is a role-playing challenge so real, you don't just play it—you live it. This 8-meg game with battery back-up uses 16-bit Genesis graphics to give you a true first-person perspective. So you'll battle your way to victory from the most dramatic position of all: the hero's point of view.

Feel the stone walls close in as you race through the corridors of realistic 3-D dungeon mazes. Danger lurks behind each corner in your quest to pass the tests of the Ancients and become a shining knight. Lightning-fast scrolling action whisks you from battle to battle for non-stop action.

Will your skill and cunning prevail over





Master the perils of the Labyrinth to become a shining knight.



ke a good fantasy rld in perspective.

lethal cave slugs, slime monsters, ghouls, and other adversaries too hideous to imagine? Can you capture the powerful Arms of Light and vanquish the forces of Dark Sol to free the enchanted Kingdom of Thornwood?

You'll find the help you need in town, where purveyors of weapons, armor, and friendly advice await your return from battle in a panoramic setting. But once you head back into the Labyrinth, you're on your own.

So prepare for a challenge so real, it'll test your courage, your skill, and a whole lot more.

You're looking at a brilliant new path to glory—and it's Shining in the Darkness.

SEGA GENESIS

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Circle Reader Service #67

Uncovering Passionate Patti in

by J.D.

TITLE:	Leisure Suit Larry 5: Passionate Patti Does a Little Undercover Work
SYSTEM:	IBM
COPY PROTECT:	Document Look-Up
PRICE:	$59.95
DESIGNER:	Al Lowe
PUBLISHER:	Sierra Coarsegold, CA





Patti's eyes were mesmerizing orbs that pulled Larry into her gaze as surely as a planet's moon affects its tide. Patti performed a perfectly paced pirouette in that long-standing bathing beauty tradition designed to melt even the sturdiest stock of manhood and gracefully fluttered her eyelids in the feminine analog to a matador passing his cape before a raging bull (and with the same intent). Larry responded to that teasing "Come hither" look in the same way that cavemen have been reduced to kept men for millennia. He gently grasped her zipper and began the sensuous ritual of exposing her creamy white shoulders to his worshipful eyes. Both hands swayed in a serpentine dance toward Patti's... suddenly, the magic was broken. "Excuse me, sir," queried the flight attendant, shattering Larry's dream, "is there something wrong with your nuts?" Airline peanuts were the last thing on Larry's mind as a red sunset of embarrassment glowed across his face.

As nearly anyone can tell from the scene just described, Al Lowe is back with the kind of irreverent humor that makes everyone a victim, from M.C. Hammer to J. Danforth himself. Alert readers will have noted that the article title describes the current game as *Leisure Suit Larry 5* (*LSL5*). This may be disconcerting to those who realize that no actual *LSL4* was ever published, but since Al doesn't mind making Larry and Patti feel uncomfortable, he sure isn't going to stop with computer gamers. So, the last thing computer gamers remember about their synthetically clad friend was the fact that he had lost both his memory *and* Patti. In fact, if it is possible for Larry to sink even lower, he has done so in *LSL5*.

In *LSL5*, Larry turns up as the Chief VCR Rewinder and Sterilizer (Beta Division) for PornProdCorp. His latest assignment is working on the new show *America's Sexiest Home Videos*, a program that solicits videos that would best be rated by Florida-based vice squads. Larry's boss, Silas Scruemall, selects Larry to find the sexiest woman in America to host the show. His mission, should he decide to accept it, is to go out and audition three of the best candidates. After all, if Larry can get lucky with any of these, they must *really* be passionate and sexy (maybe even nymphomaniacs looking to start a franchise).

Zip-Look Interface

Sierra's new parserless interface means that players only need to type words whenever they are saving a game. If Larry or Patti need to hold a conversation with someone, the player simply places the conversation balloon icon over the person they wish to speak with and the program handles the entire conversation. If there is no useful information to impart, the program informs the player that Larry or Patti has had a "meaningful conversation" with the victim of their social intercourse. Veteran **Sierra** adventurers will note that one must still look at everything and try to pick up/manipulate everything, but it is no longer necessary to guess what the program calls an item or which verb the program wants the player to use. Now, one simply places the CBS...er..."Eye" icon on an object to look at it or examine it. If one wants to pick it up, one simply places the arrow cursor on the object and clicks. If one wants to manipulate the object, one uses the "Hand" icon. The icon that may give players the most trouble is the "Zipper" icon used to relieve oneself or to initiate the PG-rated sex scenes to which the game forever alludes.

Some of the puzzles are difficult, but even novice players can take heart in the knowledge that neither Larry nor Patti can be killed (computer game immortality?), one cannot leave the screen if there is a "must do" which has not yet been accomplished and one cannot jump ahead in the game (using the fast forward button in the VCR interface) if there is an unsolved puzzle (unless it is possible to come back to the location with the unsolved puzzle). There is even on-line assistance, in that one can click on the "Question Mark" and target any item on the screen in order to receive help. The "Briefcase" icon, of course, is the inventory, and the "Blank" icon window is reserved for one's active inventory (i.e. objects which the character is currently using will appear in the "Blank" icon window).

And Away We Go (Warning: Hints Involved)

To get these interviews, Larry is equipped with a miniature camera, a Rob Lowe model which looks like a pocket protector and is to be used to get pictures...er...interviews, of the three candidates. Candidate #1 is a wealthy NYC junk bond broker, Michelle Milken. Candidate #2 is an Atlantic City professional mud wrestler/casino change girl, Lana Luscious. Candidate #3 is a Miami dental hygienist and former lambada dancer/gymnast, ChiChi Lambada.

Larry must travel to all these cities to interview each girl. "It's a tough job," he says, "but I'm going to do it!" Larry has his own limousine to travel in, but he must make sure he has all his luggage with him to leave. Before Larry leaves he must locate the files of the girls, three blank video cassettes, his camera and charging unit, his boarding pass, the Aerodork flight schedule and his plastic money card. "Now where did I put those things?" he asks. Experienced players will go into all the rooms and search *everything*.

Once on the plane, of course, Larry will have the daydream of Patti described in the introduction to this article and the action

Sierra's *Leisure Suit Larry 5*

Lambright





will move to Patti as the protagonist. It seems that Patti has just been stiffed out of two weeks' pay when she is approached by Inspector Desmond of the FBI. They want Patti to go undercover and "service"...er..."serve" her country by working undercover to infiltrate the music industry and investigate Mob influence. Patti agrees and accompanies the inspector to FBI headquarters. There, she witnesses some of the new inventions, some of which would do justice to *Get Smart* in their functional humor. She experiences a gynecological fitting for a secret transmitter, as well as receiving a new addition to her wardrobe, one which requires a wrench to adjust. Patti is given several numbers. They are a phone number, E-Mail number, a password and a code name: Agent 88. A smart player will *write them down!* Without them, one cannot even move in the game. *[**Note:** Interestingly enough, the code name was supposed to be both a play on the number of keys on a piano and a reference to Max's old number on the* Get Smart *television series. Actually, Max was Agent 86 and his "Patti" was Agent 99. See, even great game designers outsmart themselves, sometimes!]*

Patti is to investigate a studio engineer named Reverse Biaz, who specializes in subliminal recordings and a obscene rap lyricist/disc jockey from KRAP radio, P.C. Hammer. Patti has a limousine also, complete with fax, telephone, fish tank and telephone, but like anything else purchased by government requisition, they don't all work. So, how does one get started? Could be that Desmond might have an idea. As Patti travels, the presentation dissolves back to Larry.

Larry arrives at NYC's Hard Disk Cafe and is so much in awe at the sight of the memorabilia displayed that he cannot move. Too bad the loudmouthed fat lady won't shut up and let Larry get anyone's attention. Maybe Larry ought to show something official in order to get in. If Larry does get into the club, he meets Michelle and, hopefully, gets lucky. He spends his time with Michelle, boards a plane for Atlantic City and starts to daydream. Flash! The game returns to Patti at the Baltimore recording studio.

Patti has been introduced as a keyboardist (88, get it?) and, after negotiating the foyer, she makes her way to meet Reverse Biaz. He asks her to play a piece that he is recording, so the player gets to limber up his/her fingers and go with the rhythm. Even players who are tone deaf will have no trouble getting through this scenario. There are four ways to deal with Reverse Biaz: talk to him, jump him, let things take their course or "put the zipper" on him. If all goes well, Patti flies for Phillie with a gold record in her baggage. The game moves back to Larry, now in Atlantic City.

There are plenty of casinos in Atlantic City, but Larry only has only *plastic* money and it takes those *green* lettuce leaves to get past the huge bouncer in the casino. One certainly needs to meet the right kind of friend. Once inside the casino, it is a sure bet Larry can figure out some way to increase his salubrious salad of cash. He will need plenty of dough to get into the action and meet Lana Luscious. Once Larry has the pictures (astute players will not forget to turn the camera *on* in order to get the film and *off* in order to keep from running the battery down even faster than the "girls" say Larry runs down), he is off to Miami, his final destination. Naturally, the game moves back to Patti as she arrives at KRAP.

Well, there's no receptionist here and the door to John Krapper's office is locked. The phone on the wall looks promising, assuming Patti can remember that phone number which Inspector Desmond gave her by fax. Then, once inside the office, just before the secretary gets back, she has to find the evidence. Naturally, the desk looks promising and there *is* a convenient letter opener on the desk. Of course, there is always the problem of what to do with the evidence once she finds it. Hope she isn't too redundant.

Then, it is time to meet with P.C. Hammer. He may not move like M.C., but he has Patti's kind of moves (wink, wink).

Meanwhile, Larry arrives at the dentist's office where ChiChi Lambada works. Larry remembers why he hates dentists so much. Boy, ChiChi Lambada sure has some strange dental equipment, not to mention her equipment. Hope Larry's into pain. So, after a thorough cleaning and a drilling, Larry heads for home with the three video cassettes (and some pleasant memories to boot), while Patti is being debriefed by Inspector Desmond back at the FBI headquarters.

During the debriefing, Patti learns that she is to be the singer at a White House dinner. Naturally, that is where the game's denouement occurs.

Debriefing for Leisure Suit Larry 5

LSL5 is a thoroughly enjoyable game. From the opening sequence in the PornProdCorp's office to the final scene, the humor and thought that went into this game is quite evident. The game is extensive, requiring 8 MB of hard disk space and uses enough RAM that most players will have to deactivate all memory-resident programs in order to play it. The game is currently available in a VGA version with the EGA to be released soon. It supports the **Roland**, **Sound Blaster** and **Tandy** sound boards. In fact, there is an "Easter Egg" when one uses the Sound Blaster card. Every function key has a rude noise contributed by each of the development team members respectively.

Now, if they could only come up with a Virtual Reality version of Patti. In order to move beyond the great colors and sounds of this *Leisure Suit Larry*, that is just about what Al is going to have to do. Sierra embraces VR! What do you think, Al? **CGW**



Soar on Drugs

Jim Hoover has spent the last two years working with high performance fighter jets, pilots and maintenance personnel at NAS Cecil Field in Florida. NAS Cecil is a Master Jet Base located near Jacksonville, Florida, and is the East Coast home of the F/A-18 Hornet.

With white knuckles gripping the stick, the rookie concentrates on taking small, even gulps of oxygen as the tell-tale pounding of his heart beats a Caribbean rhythm in his chest. With eyes like a bird of prey focusing out of the cockpit, he makes a visual lock on the postage stamp-sized landing field ahead, his carrier. Placing his jet precisely on that flight deck means safety, success and satisfaction, but first, he has to "call the ball."

In **Velocity Development**'s new game, *Jetfighter II: Advanced Tactical Fighter*, learning how to land on a carrier is critical to success. *Jetfighter II* is a sequel to the game, *Jetfighter: The Adventure*, and tends to be much more challenging than the original game by the time players undertake the missions in Sector 3. The new game focuses on the introduction and use of the new stealth technology embodied in the F23-D Advanced Tactical Fighter (ATF). It joins a stable of three other high-tech jets which appeared in the original game: the F-14 Tomcat, the F/A-18 Hornet and the F-16 Falcon.

The F23-D "Black Widow" ATF has a completely different flight model from other jets in the simulation and it gives one a distinct advantage over adversary aircraft. The ATF incorporates the latest advances in fighter technology, including radar absorbent material (RAM); vectored thrust (which dramatically increases aircraft maneuverability); new engines which permit supersonic flight without using afterburners and enhanced weapon systems.

Fear of Flying

For those who do not want to get involved immediately in the breakneck pace of the game's fiction, the simulation allows the player to fly in a "Free Flight" mode (similar to flying around in **Microsoft**'s *Flight Simulator IV* with a Mach 3 jet). It is also the only mode in which the "spectacular time acceleration feature" advertised on the box can be accessed (use Shift-O). In this mode, prospective jet jocks and even veteran pilots can practice takeoffs and landings, view the sights of the simulated Southern California coast and seascapes or practice the critical carrier landings and catapult launches necessary for victory in the game. A *caveat* is certainly due here, however. Many gamers are experiencing a "disappearing carrier" glitch when they play the missions in Sector 3. Anyone experiencing this problem needs to download "JF2FIX1" from **CompuServe** or check with **Velocity** for a $4 upgrade.

The practice mode also allows pilots an opportunity to practice air combat maneuvering (ACM) and ground attack missions in order to prepare for the missions found in the "adventure" portion of the program. The "adventure" itself is a campaign of 125 missions which must be flown in order to defeat an enemy army of radical mercenaries and terrorists from South America. This "Latin American Revolutionary Army" (LARA) has attacked Southern California in a suicide invasion and is financed by a huge drug cartel as a diversion away from the war on drugs. Their planes and other weapons have been obtained on the Third World weapons market and they are deadly: MiG-29 Fulcrums, MiG-31 Foxhounds, Stinger surface-to-air missiles (SAMs) and surface-to-surface missiles comprise their arsenal.

The player climbs into the simulated cockpit as one of the nation's top jet fighter pilots, assigned to fly one of the game's four aircraft on either carrier- or land-based missions.

Many times, the player can choose between several potential missions in attacking key enemy targets. It is a target-rich environment. At other times, however, the computer-controlled enemy will take the offensive against the good guys and the player must respond on the defensive. If the player opts to go on

Velocity's Jetfighter II

TITLE:	Jetfighter II
SYSTEMS:	IBM with 640K
COPY PROTECT:	None
PRICE:	$69.95
DESIGNER:	Bob Dinnerman
PUBLISHER:	Velocity Development Palatine, IL



the offensive, he is presented (at the click of a mouse) with digitized images which offer information on each plane's flight characteristics and each weapon's usefulness. Players who purchased the game during its initial roll-out will note that ordnance which is not expended during a bombing run often disappears upon landing. Then, it mysteriously reappears upon take-off. Fortunately, this "Twilight Zone" of ordnance acquisition actually assists rather than hinders one's potential for succeeding in the mission. Once equipped, the mission proper begins. The opening is dramatic as the screen zooms in from an overhead satellite view, focuses down to the carrier deck and visually sits the player in the cockpit of a given aircraft. The throttles are eased forward to full military power and the catapult virtually propels the player into the mission.

The plane accelerates from 0 to 180 knots in less than two seconds and the player is off to beat the bad guys. The program tracks mission progress and calculates both the United States' and LARA's effectiveness in the campaign. Points are assigned based on the importance of the targets chosen and success in accomplishing the mission objectives. Every detail is tracked, including number of flares expended and number of SAMs avoided, but many gamers are finding that configuration differences in their machines open them up to receiving "poor" and "fair" performance ratings, even when they have followed the rules of engagement and completed the mission with a maximum score.

Fortunately, in spite of the ludicrous fiction used to justify the missions and the occasional unjustified scoring glitches, the missions are challenging, reasonably well-balanced and open to future expansion through supplementary mission disks. Many players feel like the game is too easy during the initial missions, but almost everyone agrees that the Sector 3 and Sector 4 missions are very tough.

Pre-Flight Check List (Mechanics)

The install program detects the idiosyncrasies of one's system configuration from the outset (memory, video setting, sound card, etc.) and prepares the program for loading. Once installed, the program is operated via a simple menu system.

The aircraft flight controls for all of the available jets are the same, although the cockpits differ. Unlike other high-tech jet simulators, the number of keys to operate the aircraft are minimal and most are mnemonic (for example, "R" for radar mode and "T" for target).

Jetfighter II offers some spectacular graphics, too. The scrolling is smooth, the bit-mapped explosions are impressive, the graduated horizon is comparable to that in *F-15 Strike Eagle II*, exterior light is handled differently depending on whether a mission takes place at night or during the day and various features of the landscape are very detailed. Those who want the optimal graphic touches will have to have VGA, though. The CGA version of the game is, frankly, a waste and even the EGA version does not adequately present most of the graphic excellence of the program.

Performance Evaluation

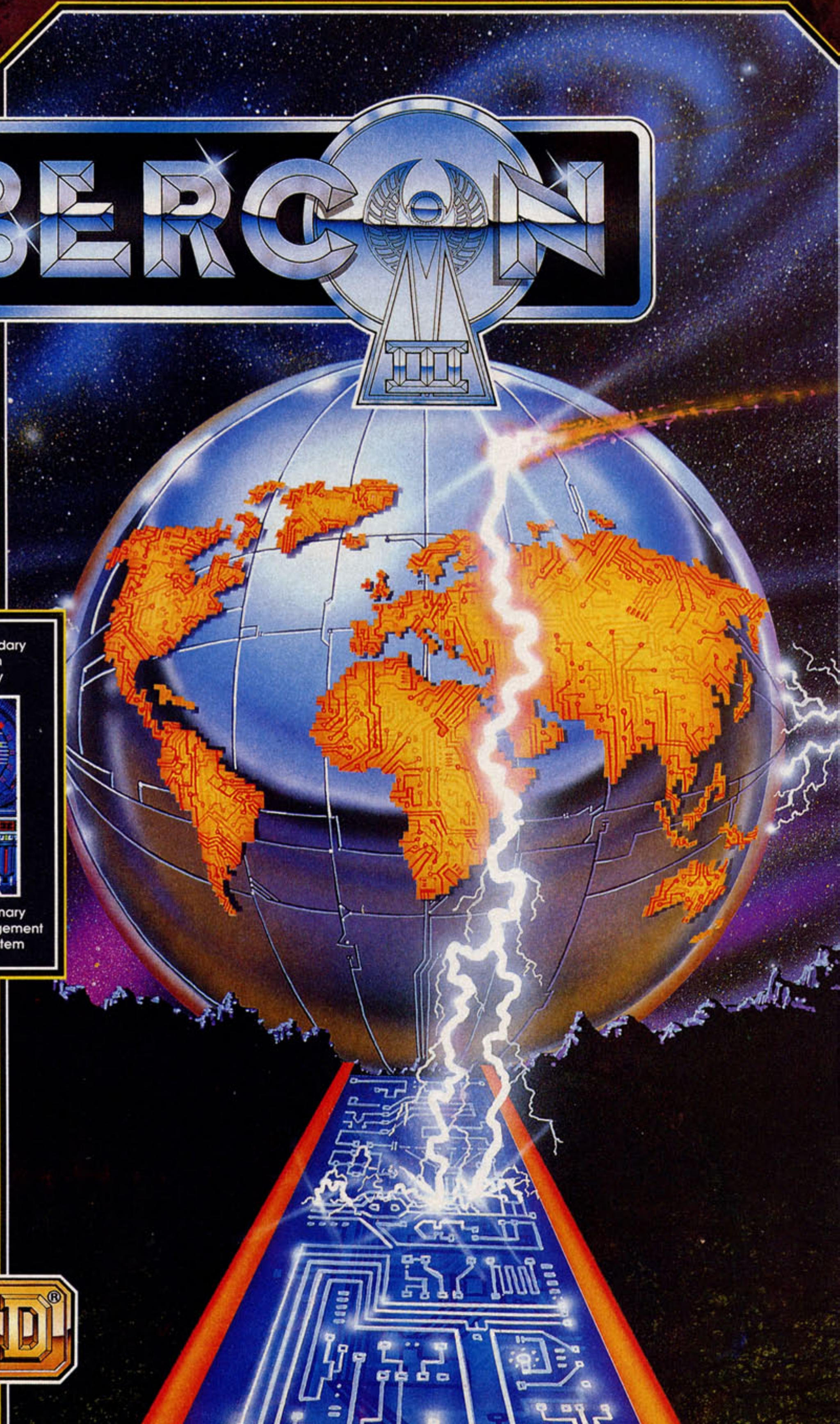
In summary, for those who do not have the privilege of attending the U.S. Navy's flight school in Pensacola, Florida, this will probably be the closest they will ever get to landing on a carrier in a high-performance jet. *Jetfighter II: Advanced Tactical Fighter* does a great job of simulating both the difficulty and exhilaration a pilot experiences once he finally places his jet on the carrier deck and comes to a screeching halt after catching the "three wire." **CGW**

SPA Top 25 Hits

MS-DOS Games

1.	*King's Quest V* (Sierra On-Line)	1
2.	*Jetfighter II* (Velocity)	2
3.	*Wing Commander* (Origin)	5
4.	*Space Quest IV* (Sierra On-Line)	4
5.	*Flight Simulator (Microsoft)*	*
6.	*Eye of the Beholder* (Strategic Simulations)	3
7.	*SimCity* (Maxis)	7
8.	*A-10 Tank Killer* (Dynamix)	6
9.	*Links* (Access)	9
10.	*SimEarth* (Maxis)	8
11.	*Chuck Yeager's AFT 2.0* (Electronic Arts)	*
12.	*Wing Commander Secret Missions 2* (Origin)	14
13.	*Lemmings* (Psygnosis)	*
14.	*Heart of China* (Sierra On-Line)	*
15.	*Elite Plus* (Microprose)	*
16.	*Wing Commander Secret Missions Disk* (Origin)	13
17.	F-15 Strike Eagle II (Microprose)	*
18.	*Where in the World is Carmen Sandiego?* (Broderbund)	15
19.	*Martian Dreams* (Origin)	*
20.	*Castles* (Interplay Productions)	*
21.	Overlord (Mastertronic)	11
22.	*Warlords* (SSG/Softkat)	*
23.	*Death Knights of Krynn* (Strategic Simulations)	12
24.	*Red Baron* (Sierra On-Line)	16
25.	*Entertainment Pack for Windows 3.0* (Microsoft)	*

*Not in May Top 25
Numbers at right margin indicate May 1991 ranking
Source: Software Publishers Association, June 1991
CGW




WATCH TH

In Search of...

P.C. Globe's Bush Buck Charms, Viking Ships and Dodo Eggs

by Deborah Muldawer

Within hours, Otto von Slinkenrat's plan will be complete. Rare and wonderful items, intended for the international culture festival, will instead be smuggled into Otto's Mongolian mansion.

In *Bush Buck Charms, Viking Ships and Dodo Eggs*, only the player can stop this evil genius by searching frantically for chocolate eclairs, Tet firecrackers and poda-poda tires. Although the plot sounds like that of an adventure game, *Bush Buck Charms, Viking Ships and Dodo Eggs* is actually an educational program. The player can only beat Otto by participating in a global scavenger hunt that ranges in difficulty from beginner to advanced.

"The Plane, The Plane" (Game Play)

Initially, the player is introduced to the game by a squeaky version of the Alfred Hitchcock theme. Rather than adding suspense, this theme adds insanity and forces most players to try to get past the preliminaries as soon as possible. An audio card does not even enhance the sound because the driver only supports the internal speaker.

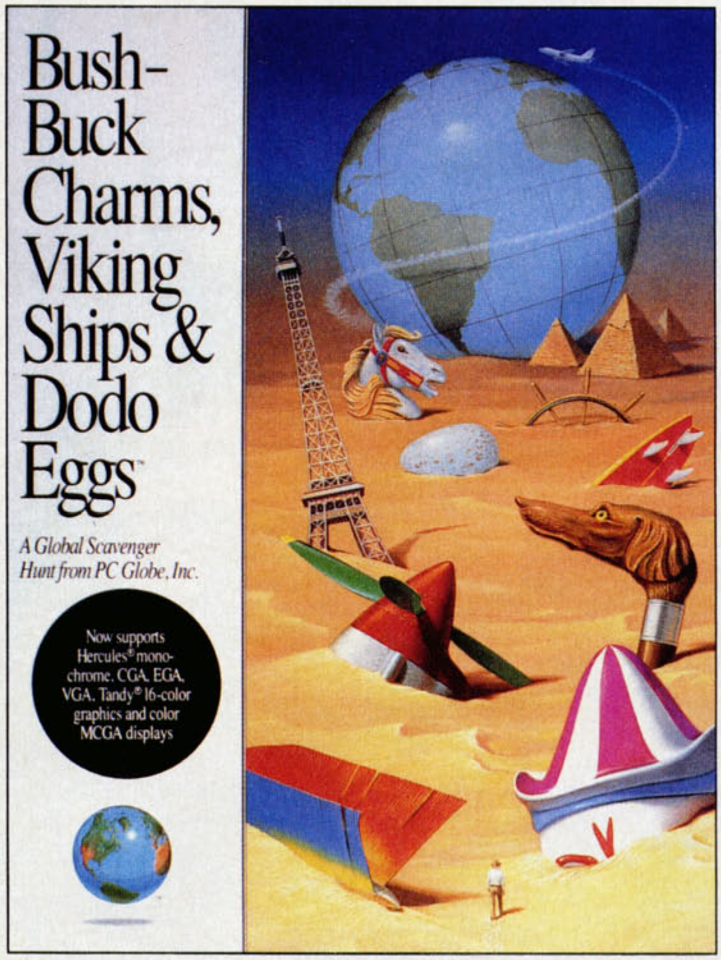
Then players are assigned a starting country and five items to retrieve. Using a plane to travel from country to country, one uses clues and city descriptions to locate the items to scavenge. The clues are found only in randomly assigned cities, but the city descriptions appear upon entrance to each new destination. While these city descriptions are not clues, they may assist one in obtaining items in some future game.

When the rare items are found, the players must return them to the assigned starting city. If the items are unharmed, they can be traded in for points, ranging in value from 500 to 1500. If the items are injured, due to long travels or foul weather conditions, the value is reduced. Because of this, it is sometimes better to take a clear circumspect route, rather than a stormy direct one. When each item is returned, the player is given ten bonus tickets and another item to rescue from Otto's greedy clutches. Although the basic premise of the game remains the same, certain features change on different levels.

At the beginner level, a thermometer icon is used to indicate whether the player is "cold" or "hot" on the trail of the various items. At this level, items are automatically loaded onto the plane whenever a player lands in the correct city.

In the intermediate and advanced levels, the thermometer is replaced by an "eye." There, one merely selects the "eye" icon in order to look for an item in a given city. This costs one ticket, however, so players will learn to use this icon economically. On the intermediate level, the "eye" will light up if an item is available.

On the advanced level, the player can only make educated guesses from given clues. First, the player does not have the option of playing alone. If a second human player does not inter-





TITLE:	Bushbuck Charms, Viking Ships and Dodo Eggs
SYSTEM:	IBM
# PLAYERS:	1-2
PRICE:	$49.95
COPY PROTECT:	Document Look-Up
PUBLISHER:	P.C. Globe, Inc. Tempe, AZ

vene, Otto von Slinkenrat himself automatically enters the game. In all levels, a disproportionate number of clues fall to the computer opponents. However, since the human player can see these clues, all one loses is a few points. If the clues appear for one's opponent, it is a good idea to write them down for future reference.

Help given on the beginner level results in a lower score. Point values are considerably less than those at the intermediate and advanced levels. Returning an undamaged item brings only 500 points. A clue is worth five and finding an item adds 50 points to the score. An unused ticket can be traded for 10 points. However, on the intermediate level, the stakes are doubled. On the advanced, the point value is tripled.

"The Plain, The Plain" (Critical Notes)

Bush Buck Charms, Viking Ships and Dodo Eggs is not designed for technical excellence. The sound is weak and the text is indistinct. Even on a Super VGA monitor, the text appeared slightly fuzzy. The maps of the world, while accurately done, do not display any superb graphic planning. Finally, the only graphics, in addition to the maps themselves, are the mission-assigning envelopes and the computer opponents.

The only good news, with regard to the technical aspects, is that they are so unexceptional that almost any system will encompass the full potential of the game. The bad news is that *Bush Buck*'s presentation hinges so completely on the brief list of facts encountered by players as they enter new cities that any hope of mnemonic assistance soon fades away. At first, one will read the city descriptions hoping for clues, but after the fifth or sixth description, all locations start to blend together and it is difficult to retain the facts one is supposed to have gleaned from playing the game. Perhaps, if the game used more pictures and less text, players would remember what facts belong to which city.

The Plan, The Plan (Conclusions)

The game, although tentatively geared for mid-school students, can be played by adults as well. An interest in geography helps, as it takes three or four games to feel comfortable with the system. Without motivation, quitting is tempting during the initial frustration of the game.

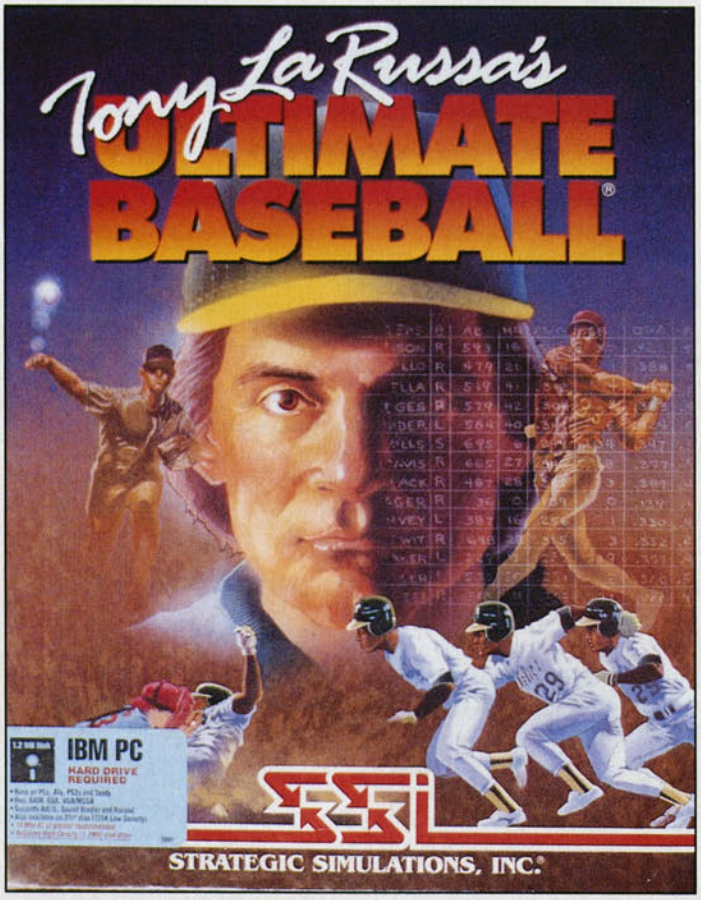
Overall, this game should appeal to serious students who do not require special visual and audio effects. The reviewer introduced the game to a twelve-year-old boy who liked the game because of the challenge and increasing difficulty. In addition, several adults responded to the game because of the intellectual stimulation it provided. *Bush Buck Charms, Viking Ships and Dodo Eggs* would probably work well in a classroom situation, but due to the two-player restriction, several copies would be needed.

If one does not have an interest in geography or history, *Bush Buck Charms* is probably not a good investment. If one wishes to learn about the world and improve one's map-reading skills, however, *Bush Buck Charms, Viking Ships, and Dodo Eggs* is a reasonably interesting and painless way to attain these skills. **CGW**

Great "A's" Baseball

SSI's Tony La Russa's Ultimate Baseball

by Win Rogers



TITLE:	Tony La Russa's Ultimate Baseball
SYSTEMS:	IBM (reviewed), Commodore-64 (available soon)
PRICE:	$49.95
COPY PROTECT:	Document Look-up
DESIGNER:	Beyond Software
PUBLISHER:	Strategic Simulations, Inc. Sunnyvale, CA

In this era of escalating sports salaries, it seems there is a new all-time record salary contract every few weeks during the off season. The pressure of competition can stimulate similar developments in software technology. *Tony La Russa's Ultimate Baseball* (*TLUB*), a new release, is already the best-looking, best-playing baseball simulation yet, but it is not clear how long it will hold that title. Loyal *Earl Weaver Baseball* fans waiting for version II may not believe it, but *TLUB*, designed by a member of the original *Earl Weaver Baseball* development team, may well prove more satisfying than the upgraded version from the industry leader.

The designer of a computer baseball simulation has a tall order these days. The perfect game would provide rich visuals, a solid statistical foundation and the playability to combine graphics, arcade action and statistics smoothly. It would take advantage of the faster processing speeds, VGA graphics and sound boards of today's home computers, but not freeze out those with older, slower machines. It would work equally well entertaining a couple of kids testing their reflexes and devoted statistics buffs replaying old pennant races. Current games don't try to meet all these criteria. *Hardball II* doesn't utilize real player statistics. *MicroLeague Baseball: The Manager's Challenge* doesn't support arcade action. Some serious statistics-based games don't worry about graphics at all.

For players in the EGA/10-MHz league or higher, *Tony La Russa's Ultimate Baseball* is an outstanding product that does many things well. It is strongest in graphics and arcade support, and offers a lively, visually appealing playing environment. Players pitch, swing the bat, slide and leap for fly balls with convincing energy. Since a single camera cannot cover an entire field satisfactorily, multiple camera angles can be distracting and a small scale washes out detail, *TLUB* opts for overlapping windows and a behind-the-plate camera that scrolls over an impressively detailed playing field. The action is in an unnamed stadium; disks with additional stadiums are promised from the manufacturer. There is a large closeup window for pitcher-batter matchups that disappears when the ball is in play, and a small diagram window for tracking the movements of the runners on the basepaths to aid in deciding where a fielder should throw the ball.

Complaints about *TLUB* in this review should be understood as minor quibbles about a product that delivers a lot of satisfaction. For example, not everybody will like the somewhat hard-to-read scoreboard-light grid. *[Publisher's note: Personally, I like it.]* There is a mandatory look at the line score at the end of each half-inning to show the logo of one of the commercial firms who have paid for this exposure (with promotional consideration). Realism in a baseball simulation is one thing, but it is annoying to pay for a computer game and then be forced to watch real commercial messages.

Twenty-six teams are provided, one for each current major-league franchise. Each is stocked with an all-time all-star roster for that franchise, with no currently active players (for licensing reasons). Each player is represented by his stats from an outstanding season. This makes for enjoyable games once one gets used to Carl Hubbell playing for San Francisco, Walter Johnson for Minnesota and Jimmie Foxx for Oakland. Of course, the pickings are pretty slim for Toronto and Seattle, with only fourteen seasons of history and active players ineligible. Additional player disks — the 1990 season and historic teams — are promised later this fall. Each roster can hold thirty players, twenty-five active at any one time, plus five on the reserve list. Players can be moved off the reserve list, such as to replace an injured player, and when playing a simulated season, the game will make such changes automatically.

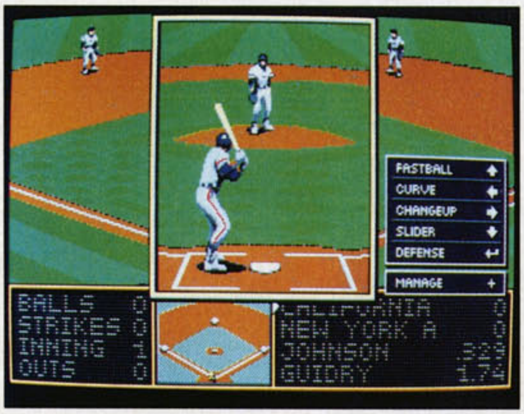
To enjoy the game requires getting used to the stutter. There is a hesitation routine built into the game on every pitch that results in a ball being put in play or a stolen base attempt. After the ball is hit, the closeup window disappears and the play is restarted from the moment of the pitcher's delivery. This disruption of the flow of action is very confusing at first, but is easy to get used to.

However, it is a real drawback to have the stutter there when simply managing or watching the computer do so. There is no need for the closeup window when there is no choosing of pitches or swinging. It slows down the game and also diminishes the illusion of recreating historic players. The larger and more detailed the animation, the more likely the reaction, "But that's not Sandy Koufax!" The menus for selecting pitches and managerial strategy are always there, too, whether the game is being played in a mode that makes use of them or not.

Hitting, pitching, fielding and baserunning can be under the player's direct control in All-Star mode, and there are two easier modes to facilitate learning. The Pro level will handle fielding; the players on the field will come up with the ball and wait to be told where to throw it. The Rookie level also handles baserunning and, when playing against the computer in Rookie mode, the pitcher will serve up better pitches to hit. The simulation runs at about half real-life speed in all modes, which is a boon for arcade players but makes manage-only or computer-managed games drag. There ought to be a way to speed up the pace of the simulation on faster machines.

In batting it is possible to swing normally, go for the fences or short-

en up to make contact. The manager can also put on a hit-and-run, steal or bunt play. Pitchers choose both the type of pitch and the location. Batting is simple to learn, though the ball is harder to pick up than in some other arcade games.



Fielding is difficult, but is aided by a "landing area" circle that appears on the field to mark where a fielder should be to play the ball. To throw the ball, one presses a key or moves the joystick to indicate the base to throw to and then presses another key or the joystick button to release the ball.

It is unfortunate not to be able to access a strategy screen with the full rosters of both teams, including lineups and bullpen forces with batting or pitching side specified. That's what is needed to plan intricate late-inning bullpen strategies. In *TLUB*, the information that is there is scattered across a number of screens. The strategy screens, though limited, are lively and clever. The bullpen screen, for example, has little animations showing the pitchers who are warming up, the one who is on the mound and the one recently sent "to the showers." When playing against the computer, the only way to get a look at the opponent's bench or bullpen to see what substitutes he or she has available is to exit the game and momentarily change the opponent to a human manager. It is not possible to print out rosters to get this information.

The game takes some visual shortcuts. Color of skin is a variable in the data base, and black and white pitchers and hitters can be distinguished in the closeup window. However, in the smaller-scale regular screen all players are white, as is any baserunner visible behind the pitcher at second base in the closeup screen. The figures in the bullpen, on deck or in the showers on the strategy screens are also all white. It's too bad that this nice touch was not carried out more completely. Another awkward moment occurs when the camera scrolls to the outfield on a long fly and the fielder doesn't start into motion until the camera gets to him, which makes him look slowfooted and inept.

The game supports EGA, MCGA or VGA graphics, soundboards and joystick; there is no mouse support. The VGA screens and animations are stunning, significantly better than EGA. On a Sound Blaster, the audio was not particularly impressive, but does include opening theme music, the sounds of umpires' calls, the effects of balls hitting bat and glove and a brief crowd outburst after a home run. The program is a memory hog and must be run from a hard disk, where it takes up 4.7 MB. The program disks contain compressed files that are decompressed during installation. It is available on 3.5" low-density or 5.25" high-density diskettes. The developer recommends a processing speed of at least 10 MHz and 640K of RAM. The game is also *promised* in a Commodore-64 version which has not been evaluated by this reviewer, but is said to lack some of the features of the MS-DOS version.

There are Exhibition games, with no effect on standings or statistics, and League games. *TLUB* includes many of the playing options introduced by *Earl Weaver Baseball*, but some choices have been made by the designers. There are natural grass and artificial turf playing surfaces, but the choice is dictated by which surface the selected home team uses in the major leagues. It is not possible to experiment with the Designated Hitter in a National League season, since it is in effect only for Exhibition games or when an American League team is the home team in League games. Since the Designated Hitter must be in effect in the American League in League games, it is not possible to simulate pre-1973 American League seasons.

Although it is not obvious from looking at the generic stadium, fence distances and wind conditions of each team's current ballpark are factored into the simulation. Disks with the visual characteristics of specific parks are forthcoming from the manufacturer.

There is good support for playing out an entire simulated season though, again, many choices have been made by the designers in advance. *TLUB* will replay an entire season in a matter of hours (or less, depending on the computer's processing speed) and will keep track of standings and individual player statistics. 162-game seasons, 81-game half-seasons, and shorter "round robin" seasons among the teams in each league are possible, but not a pre-1961 154-game season. The program will stop and let you play or watch any "featured game" you wish. A box score can be printed out at the end of a featured game. While the season is being played out, one can watch the standings changing day by day as the pennant race heats up and still use the "Escape" key at the end of any simulated day to select and play a featured game. Once the simulation has stopped on a featured game, the designation of which games will be featured in the future can be determined. Even in the middle of a game, one can change the mode and opt to have the computer play it out or take control away from the computer.

Two simulated seasons had predictable results. The old franchises did the best — the Yankees, Athletics, Cardinals, Giants and Tigers. The simulation apparently insures that players' statistics will not be too far from their real-life world records and that players who had outstanding stats in a few games will not be able to play complete seasons at that rate and become league leaders. The home run leaders were Hank Greenberg, Jimmie Foxx, Ralph Kiner and Hack Wilson; Maury Wills and Ty Cobb were the best base stealers; and Sandy Koufax, Bob Feller and Herb Score had the best strikeout records, while Walter Johnson and Christy Mathewson led in ERA.

The lack of printing support is a major weakness of the program. Printing the box score after a featured game or exhibition game is the only printing possible. Team rosters, lineups, schedules, standings in simulated leagues, individual player statistics and league leaders in various categories can be viewed — the league leaders on a clever screen that lets you sort for the best and worst in a variety of categories — but not printed out. Hopefully this weakness can be corrected in a future upgrade or utility disk.

The basic game provides limited support for those who want to create different teams and leagues by adding or trading players. The promised "Fantasy Manager" disk may remedy the situation. Trying to create new teams, though theoretically possible, is very frustrating. The game cannot access teams from different drives or subdirectories. There is no way to create a blank team slot for building a new team without erasing an existing team. It is possible to trade a player from one team to another, but not to "clone" a player to build a new configuration of teams. Pitchers can only be traded for other pitchers and position players for other position players. When an existing team has been erased, there is a blank roster for trading or adding new players. Players can be added by moving them from other teams or entered from scratch.

The player statistics screens are informative and intelligent — a real innovation. The statistics are divided between the few that are essential for running the simulation and others that are optional. As one starts entering statistics, the program automatically provides default lefty/righty breakdowns if they have not been provided and default player ratings, all of which can be changed. The game includes a clutch hitting rating, a likelihood-of-injury rating, a streak rating so that a player's performance over the course of a season will mimic real life; it also stores the player's age. According to the developer, there is a bug in the program when entering your own pitching performance statistics (affecting total at bats against a pitcher) which can be corrected by a utility disk available on request from the manufacturer.

Apart from the stutter, the scanty print options and the lack of access to information about the opponent's roster, many of the limitations of *Tony La Russa's Ultimate Baseball* are likely to be remedied by the "Fantasy Manager" utility disk. *TLUB* packs a tremendous amount into a single box. Most of the tradeoffs it makes are sensible and the result is a remarkably attractive, enjoyable simulation. **CGW**

From the Cockpit

Flying On-line With CompuServe and GEnie

by Timothy Trimble





It used to be that most armchair pilots had to fly in their own virtual world, never to be bothered by other aircraft. With the latest technology in communications and on-line information services, however, it is now possible for the armchair pilot to experience the thrill of attempting to land at a busy airport or fly a bombing run while under attack by multiple enemy aircraft.

CompuServe Fly-Ins

For those that enjoy the excitement of flying **Microsoft**'s *Flight Simulator*, CompuServe Information Service (CIS) has a special section dedicated to flight simulation pilots called FSFORUM. Not only is it a good place to chat and share stories about those "hairy" approaches, but it is also the location of the first electronic simulated fly-in. A fly-in is kind of like a party for pilots. Everyone agrees to meet at a pre-defined airport on a certain date, walk around and look at all the various aircraft, and have discussions about flying. The fly-in on CIS is very similar in that a specific airport is selected, the date of the fly-in is announced and the participants all fly in to the location using *Flight Simulator*.

Once the date and time for the fly-in is announced, the armchair pilots prepare and submit their flight plans. Each pilot is assigned a time slot for arrival and a special phone number to call from within *Flight Simulator*. This connects the pilot to a "receiver station" which then issues Air Traffic Control (ATC) instructions. Each "receiver station" is manned by a CIS sysop (operator) that keeps track of the air traffic approaching the airport and thus issues instructions to the pilots. The operator is also on-line to a conference room on CIS and is able to describe the approach and landings to others in the conference room. There is hope that they will be able to incorporate the use of *Tracon II* (the air traffic control simulator from **Wesson International**) for future fly-ins.

From the armchair pilot's perspective, each pilot is "honor-bound" to fly the entire course from the home airport in real time to the destination airport. Once the pilot arrives within the appropriate airspace in their designated time slot, they will then establish a connection with the receiver station and receive instructions from ATC for their final approach and landing at the airport. After landing, the pilot can log on to the conference room and talk with other pilots that have already landed and the receiver station operators as they "talk-in" other approaching aircraft.

Response to the CIS fly-ins has been very exciting, with many participants remarking about the added realism that is provided by interfacing with all the other pilots and operators in a coordinated effort. There is even a "souvenir" of the event available. The CIS sysops prepare a group photo (using the GIF graphic standard for PCs) of all the aircraft at the airport.

Getting started with a fly-in requires a copy of **Microsoft**'s *Flight Simulator* and a subscription to **CompuServe**. In addition, plenty of information and help is available from the FSFORUM. The fly-ins are scheduled on a regular basis and many of the on-line armchair pilots will be glad to help.

GEnie's *Air Warrior*

Air Warrior (on **GEnie**) is the logical choice for those that are more interested in a good ol' hairy dogfight than a social event. *Air Warrior* is a multi-player air combat simulation based on WW II fighters and the attendant WW II theaters of war.

Armchair pilots in *Air Warrior* can select from a wide range of American, British, Japanese, Soviet, and German aircraft and then fly as part of one of three nationalities. Besides being able to fly in single-seat fighters, multiple players (up to seven) can join together to man the various stations in a heavy bomber. In addition, tanks and jeeps can be manned by those that prefer to keep their feet on the ground.

The environment is made up of both European and Pacific terrains and include a large assortment of ground targets. (Be careful, since some of the ground targets shoot back!) Being able to knock out key strategic targets will cause problems for the other nationalities, such as knocking out their radar, fuel refineries, and aircraft factories.

Other features of *Air Warrior* include training sessions and a special practice area for those that are just getting started. All pilots are able to communicate with each other via public or private intercom channels. There is also a gun-camera mode that allows the play-back of a flight along with any radio traffic.

One of the big differences between *Air Warrior* and other flight combat simulators is that it requires GEnie in order to function. Two programs make up the *Air Warrior* environment, a host program that runs on GEnie's host computers and a local program that runs on the player's home computer. The local program handles all of the graphics, sound, and flight calculations. It communicates with the host program to provide the player with information on the environment and the interaction with other players.

Besides the free-for-all combat that normally takes place within *Air Warrior*, there are also organized squadrons, weekend historical campaigns, and competitions. Another nice thing about *Air Warrior* is that it is constantly undergoing improvements due to feedback from its many players. The *Air Warrior* file library contains a large resource of information on combat tactics, flight characteristics, and training hints and tips. A large amount of high-quality graphics have been provided by the players themselves and are available within the library as well.

Air Warrior will definitely provide a great thrill to anyone willing to go against "live" opponents. This pilot's biggest thrill was while manning the tail gunner position of a heavy bomber with about nine enemy fighters on our tail, but then, that's another story.

Getting started with *Air Warrior* requires a subscription to **GEnie** and the *Air Warrior* starter kit (which can be downloaded from the *Air Warrior* library). *Air Warrior* supports IBM, Macintosh, Amiga, and the Atari ST.

Where To From Here?

It is a sure bet that, as technology continues to change, we will see more advances in on-line flight simulations and enhancements in realism. In fact, how about some 3-D goggles, touch-screen instrumentation, wind in the hair, etc.? Oh, well, maybe just a while longer....

Until the next flight, this is Timothy Trimble, from the cockpit.

Timothy Trimble can be reached on CIS at 76306,1115 and on GEnie at xtx06803. **caw**

The "Human Cost"

(Continued from page 54)

tions, in all their permutations, in approximately 600-700 hours. Writing conversations includes the process of advancing the plot, creating distinctive NPCs and creating mini-quests.

Endgame

Finally, the perceptive reader of this article will note that it has not yet spoken of either the Introductory sequence (200-plus hours) or the Endgame sequence (150 hours). Since the former must be rendered beautifully in order to hook the player into the game and the latter must be handled carefully in order to adequately reward the player for investing his/her time in playing the game, most companies take extra time with these sequences. This is not the old "The Splash Screen Sells The Game" syndrome of the early years of computer games. Rather, it is part of creating an entire package that holds the player from start to finish.

It is impossible (and would probably be boring) to duplicate *all* the tasks inherent in bringing a *Cyberfunk X* to market, but it is to be hoped that the current article will help *CGW* readers to understand more fully the laborious task of bringing a state of the art computer game to market. Our hypothetical *Cyberfunk* game alone is already at over 7,000 "man-hours" to produce. Indeed, when one considers that many of these tasks run over the number of hours initially allotted them, one finally grasps the fact that developing computer games is a risky business. **cgw**

Conversions Received

Design Your Own Railroad (Abracadata) IBM
Altered States (Accolade) Amiga
Stratego (Accolade) Amiga
The Playroom (Broderbund) Macintosh
Dino Wars with 256 Colors (DigiTek) IBM
3 in Three (Inline Design) Macintosh
Battle Chess II: Chinese Chess (Interplay) Amiga
Bill Elliott's NASCAR Challenge (Konami) Amiga
Classic Board Games (Merit Software) Amiga
Action Stations (RAW Entertainment) Amiga
Blitzkrieg: Battle at the Ardennes (RAW Entertainment) IBM
White Death (RAW Entertainment) IBM
Worlds at War (RAW Entertainment) IBM
Space Quest 1 with 256 Colors (Sierra) IBM
Conflict: Middle East (SSI) Amiga
Death Knights of Krynn (SSI) Amiga
Secret of the Silver Blades (SSI) Amiga
Decisive Battles of the American Civil War: Vol. I (SSG) Macintosh
Halls of Montezuma (SSG) Amiga
MacArthur's War (SSG) IBM
Aracnophobia (Walt Disney Software) C-64 **cgw**

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Death Knights of Krynn	31.95
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Deluxe Paint Enhanced	82.95
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The Reviewer's Challenge

MicroLeague Baseball: The Manager's Challenge

by Win Rogers

TITLE:	MicroLeague Baseball: The Manager's Challenge
SYSTEM:	IBM (reviewed) Macintosh, Amiga (soon)
# OF PLAYERS:	1-2
PRICE:	$39.95 as upgrade ($29.95)
COPY PROTECT:	Document Look-up
DESIGNER:	MicroLeague Sports Assn.
PUBLISHER:	MicroLeague Sports Assn. Newark, DE

Though *MicroLeague Baseball: The Manager's Challenge* lacks some of the bells and whistles of today's best animated baseball simulations, it is a good bargain. It offers no arcade mode and concentrates on "the manager's challenge" in winning a ball game. It does not demand advanced graphics capability or fast processing speed and actually performs better on slower machines. With its large array of supplementary disks, it promises a complete baseball strategy environment. It arrived in stores several months before the long-awaited *Earl Weaver Baseball II* and took advantage of its lead with a visible advertising campaign and a companion volume, available in bookstores as well as software stores, that includes a demo version of the game.

The entertaining companion volume, the *MicroLeague Baseball Official Field Guide and Disk* (**Bantam**), offers comments on managerial strategy, brief profiles and tips on managing 260 historic baseball teams (ten per franchise stretching back to the early years of the century) and in-depth analyses of three dozen more from the 1927 Yankees right up through the 1990 World Series opponents. No matter what baseball simulation one uses for recreating historic teams, this book should be kept handy for friendly, informative strategy tips and assistance in making up lineups and evaluating relief pitchers. All the teams profiled are available on MicroLeague disks, but all may not yet be available for the new version of the game.

The IBM-compatible disk packed with the book is a demo version of *The Manager's Challenge* with six recent World Series teams. It gives the look and feel of the full game and permits complete games, pitching changes, pinch hitting and play against another person, against the computer or with the computer playing both sides. When the computer plays both sides, however, there is no way to control the speed and, on a fast computer, the action whizzes by at breakneck speed. The book is a good investment, since it previews the graphic environment of the full game and has value even independent of *The Manager's Challenge*.

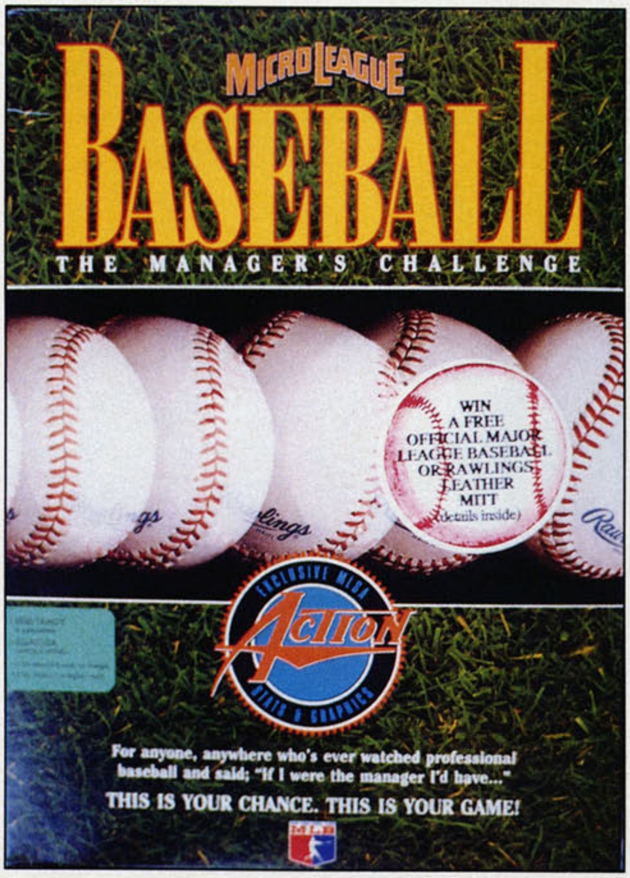
Let's leave the demo and boot up the full game, which offers more strategic choices, more teams, more stadiums and greater control over rosters and statistics. Twenty-six teams are provided from the 1927 Yankees to the 1988 Dodgers and Athletics (the 1990 player disk costs extra). All are actual team rosters, not all-star aggregations. *The Manager's Challenge* is best at supporting two players managing two different teams, though it also supports one player against the computer and computer-versus-computer play. It boils the game down to one pitch to each batter, eliminating balls and strikes. However, three times during the game, for added drama when playing in two-player mode, each



player is able to go full count, choosing pitch location and having balls and strikes counted.

The EGA graphics are straightforward and clean. There is a CGA mode and, while VGA is supported, it is no different from EGA. The game offers a choice of Yankee Stadium, Dodger Stadium or Royals Stadium. The single-camera view is from the stands directly behind home plate, and the camera pans left or right when the action is in one of the outfield corners. The game can be played with either menus that open to show offensive and defensive strategy options or keystrokes. Two players can easily keep their baserunning and defensive signals secret from each other. There is an electronic stat book to aid in deciding when to bunt or where to position fielders. (Players are rated, among other things, on their baserunning ability and on their tendency to pull the ball.) The animations can be turned off for a faster game. There is the option of choosing which pitch to throw when on defense and of guessing which pitch will be coming when at bat. This feature, like many options of the game, can be toggled on and off. In quick-play mode, the computer can complete a series of simulated games between two teams. There is no way to pre-program the schedule for an entire season.

MicroLeague Baseball was introduced in 1984 and upgraded in 1989. This third version adds mouse and hard disk support, more attractive graphics (especially in the set-up and statistical display screens), additional statistical categories such as lefty-righty breakdowns of hitters' and pitchers' performances and thirty-man rosters, with five players on the disabled/reserve list. Since differentiated lefty and righty stats do not exist for teams prior to 1982, *The Manager's Challenge* apparently creates imaginary differentials for older players in order to increase strategic realism when playing with older teams. Another new feature keeps a player with outstanding statistics in very few ap-



pearances from becoming a league leader: a player "tires" when he is used in many more games in the simulation than he appeared in during the real-life season.

Rosters can be printed out before the game and a box score afterwards. Game statistics and standings can be saved after the separate stat compiler provided has been used to initialize a league. The stat compiler allows players to be moved on and off the disabled/reserve list. However, existing players cannot be moved onto new rosters or traded, and new players cannot be added. Neither can league-leader lists be generated from simulated seasons without the separate General Manager/Owner's Disk. The company promises that future disks will offer additional ballparks and the chance to make use of the managerial strategies of great managers of the past.

Ideally, a simulation will draw as little attention to itself as possible. When there are limitations imposed by the program, they should be consistent with the limitations of the real-world environment that is being modeled. *The Manager's Challenge* falls short of this ideal. If a pitcher is warmed up while his team is in the field and is not sat down before the end of the half-inning, he disappears from the roster. A sudden double play that ends a threat can cost one's ace reliever for the game. With the computer managing both sides, there is no way to stop to check a lineup or see a player's stats, see who's warming up or even turn off the sound. The manual says that it is possible to see what each player has done so far during the game when he steps up to the plate, but this feature does not work in the reviewer's copy.

The visual environment in *The Manager's Challenge* provides a simple functional setting for simulated games, but is lacking in visual excitement or realism. There is a limited repertoire of animated sequences. There don't seem to be any infield hits. All throws over to first get the runner (except on bunts or errors), and all hits go right past immovable infielders to the outfield. There isn't much flow to the action. If the ball is hit to the shortshop, the third baseman and second baseman don't move a muscle. Even worse, the program does not adjust for the computer's processing speed and there is no way to adjust speed from within the program. So on a fast computer, the animation is too fast for the play-by-play test. The runner is retired and has disappeared from view before the screen window reads "Here's the throw..."

Further, the computer manager could use more artificial intelligence. In carrying out a series of computer-versus-computer games between two teams, the computer managers can follow a pitching rotation, but do not platoon and *always* use the same lineup. This reduces the realism of the results over a full 162-game schedule. The computer manager's 1965 Dodgers lost a simulated game against the 1927 Yankees and unfortunately, when trailing 2-0 in the bottom of the eighth with two outs and the bases loaded, he did not bother to pinch hit for Sandy Koufax.

There is an informal, home-brew atmosphere to the **MicroLeague** game and company that gamers may find charming or annoying. They specialize in sports simulations and are not too large to be responsive. Registered owners get an occasional newsletter with information about features and hints from other players. So gamers who find problems should speak up if they would like to have them corrected. Be warned, however, that there probably will be problems.

An early review copy has several apparent bugs, and an inquiry letter yielded a nice note with an updated game disk. The revised version gives more access to player stats while a game is in progress. But it still has a team from "Detriot," even though they said they had corrected this misspelling. The later version adds a pop-up scoreboard to the computer-versus-computer mode to give one some idea of what is going on (in the first version, players had no clue), but the new scoreboard is unreadable — faint and quick to disappear. Worse, they added the same pop-up scoreboard to the player-versus-player and player-versus-computer modes, where it duplicates an existing, more readable scoreboard and covers up some of the play-by-play text.

The company says it offers so many different disks in order that buyers can pick and choose and don't have to buy more game than they want. Costs can mount up, though, and one should be wary of added costs that are obscured by misleading packaging of the game and accompanying book. The box says that the game is compatible with original MLB Season, Franchise History and All-Star disks, but an enhanced stat compiler must be purchased in order to convert the files or the disks must be traded in at an additional charge. The companion book promises a "coupon that will save you money when you upgrade to the full... store edition," but the coupon does not help until after the full version has been purchased and one is ordering additional utility or team disks.

The Manager's Challenge does not offer as many playing options, animated sequences or statistical categories as some other games, but it provides a straightforward and playable simulation. The basic game is a bargain if one accepts its limitations, and its range of supplementary disks is awesome, although it can take a considerable investment to get all the teams and options that one might want. The *Official Field Guide and Disk* by itself is an enjoyable introduction to *The Manager's Challenge* and, more generally, to the pleasures of strategic baseball on the computer. **cgw**

Red Team Dreaming

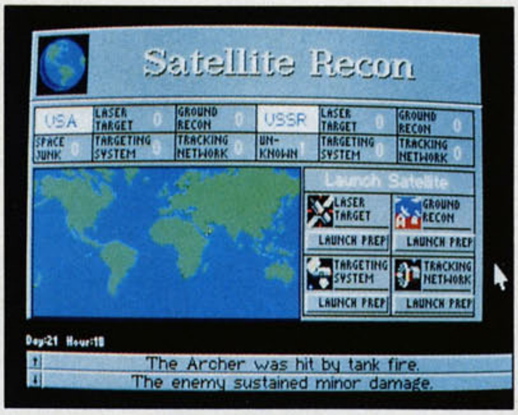
The Cardinal of the Kremlin

by Allen L. Greenberg

Any computer game based on a book by Tom Clancy automatically presents a paradox along the lines of Lewis Carroll that might well be called "Red King Dreaming." In *Alice Through The Looking Glass*, the Red King was a part of Alice's fantasy at the same moment he was dreaming of Alice. Likewise, who is to say that the player, busily perched at his favorite computer, is not just another of the high-tech super spies who populate Clancy's stories?

The Cardinal of the Kremlin, an action/strategy game, is an intense glimpse of the world of techno-politics and challenges the player to be as quick-witted as any of that author's heroes. The game features a deluge of information to be reacted upon and enough bar graphs to fill an average college-level text book.





TITLE:	The Cardinal of the Kremlin
SYSTEMS:	IBM, Amiga
REVIEWED:	Amiga
COPY PROTECT:	Documentation Look-Up
PRICE:	$49.95
PUBLISHER:	Intracorp., Inc.

S.D.I. in the Sky

While Clancy, in his introductory notes to the game, takes exception to the notion that those days are behind us, *Cardinal* is clearly a cold-war affair. The game simulates the bitter struggle between the United States and the Soviet Union to evolve a satellite-based defense system, commonly known as the S.D.I. (Strategic Defense Initiative). Faced with a job description that defies categorization, the player is accountable for events which range in location from the White House to the Kremlin. The person holding this rather high-pressure position is answerable only to the president of the U.S.

Such a person (i.e. the player) must ensure that testing and development of the satellite system goes smoothly and is maintained under reasonable security measures. In addition, the CIA needs instruction as to how to best keep an eye on Russian scientists and Soviet espionage forces. Finally, decisions regarding foreign relations with both the Russians and rebel fighters in Afghanistan are also the responsibility of this underpaid employee of the federal government.

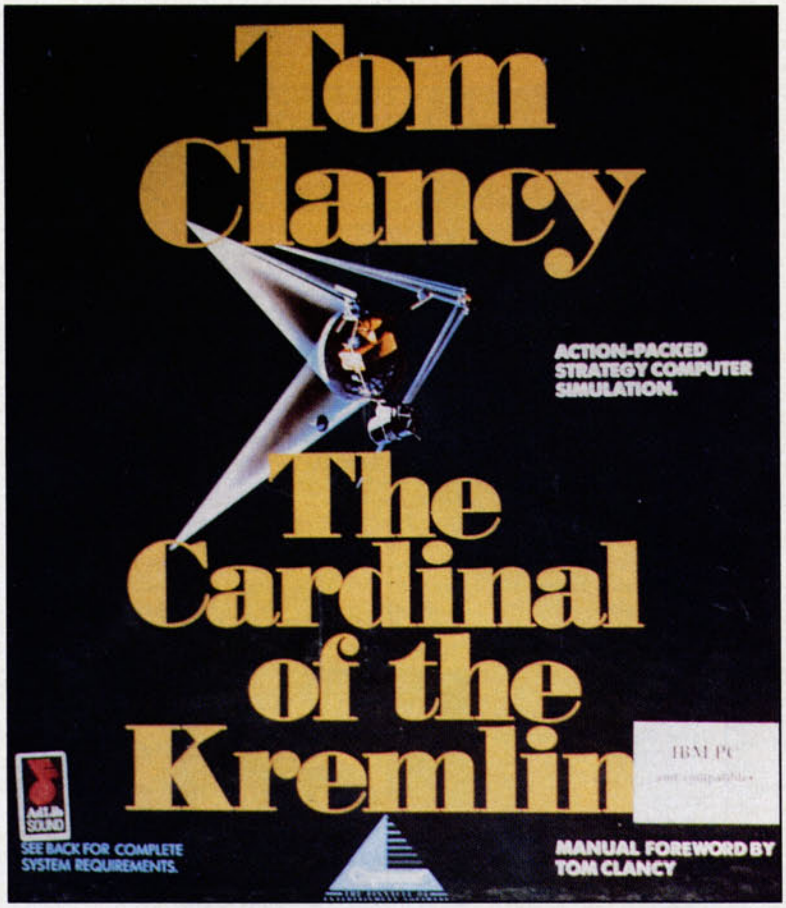
These myriad tasks and assignments await the player's attention as he begins his first day on the job. A main menu lists the general departments in which the player will be working, and this screen leads into a seemingly limitless maze of sub-menus and bar-graph information screens. In addition to these, *Cardinal* features some limited graphics and a smattering of arcade action.

Three separate research areas are required to give birth to the laser satellite system with the American code name "Tea Clipper." The three departments, covering "Power," "Software" and "Targeting," must each be assigned a department head and a priority level. Those with a very high priority level will accomplish their research more quickly, but only for a short time. An overworked department head will soon go running into the sunset of unemployment, suffering from classic American burn-out.

The player is responsible for scheduling several laboratory tests, without which research will not progress. There are nine of these, each of which will have to be repeated several times before the system is completed. Bar graphs give the player an idea of how urgent the need is to run a particular test, as well as the need for FBI-generated security, due to foreign interest in that research area. Annoyingly, a test cannot be scheduled if the department head is otherwise engaged or away doing R&R. In addition, space shuttle launchings, necessary to put into orbit the assorted satellites, must also be scheduled throughout the game.

NASA, Not Your Baby

Every bit of scientific information helps the research effort, particularly if it comes from the other side. To this end, the CIA has nine strategically placed agents in the Soviet Union waiting for instructions and assignments. Once activated in a particular area, these spies will speed up American research while slowing down efforts in Russia. Using *Cardinal*'s ubiquitous bar graphs, in this case a danger-meter, the player must quickly relieve the agent of his or her assignment before the agent is discovered and arrested. The most highly placed agent is "The Cardinal" who, midway during the game, encounters the same inconvenience as the character in Clancy's novel. He will come under investigation by the KGB and consequently become useless to the Americans.



Realizing the extent to which the CIA is going to obtain enemy information abroad, the FBI anxiously awaits instructions on how to prepare for similar treatment from enemy spies. Carefully noting the enemy-interest-meter, the player must judge the appropriate amount of security to post at each research area. With too little security, information will flow like vodka into thirsty Russian spies and oppressive security measures will slow down progress at home. Should American scientists be doing too well in their work, the Soviets will kidnap a department head, and this leads into one of the game's rather tame arcade sequences. Seen from above, the player must use his American-built vehicle to rear-end the Marx-mobile and rescue the scientist. Several bar graphs are included in this sequence so the player may gauge his progress and the condition of the various cars involved.

Starlight, Star Bright

Similar arcade action, as well as further espionage, is to be found in Afghanistan, where a rebel fighter known as "the Archer" waits uneasily for the player's signal to attack the Russian satellite project known as "Bright Star." Up until that attack, the U.S. must keep the Archer's bunker well stocked with supplies and ammunition to maintain both his goodwill and his strength. When the player decides that the most advantageous time to use the Archer has arrived, an overhead view of the Russian lab appears. The player must guide the Archer through the complex, destroying as much equipment as possible before Soviet security brings the attack to an end. Fortunately, the game designers have made sure that there is no shortage of bar graphs on this highly suicidal mission.

Cardinal's final arcade sequence involves the use of these satellites to prove that America has achieved its goal of an effective satellite defense system. This simple arcade exercise will be difficult or impossible to accomplish until the supporting technology has reached the proper level.

Peace Paranoia

Ironically, while the superpowers struggle for satellite supremacy, they are also going through the motions of peace negotiations. Topics on the table include mutual reduction of those same weapons which the two countries are actually trying so earnestly to develop. The only purpose of these talks is to allow a lagging country an opportunity to cover its weaknesses.

In this section of the game, the player must indicate the U.S. position on various issues. Naturally, the process leaves little room for doubt as to Clancy's position on peaceful settlements.

For True Blue Eyes Only

Unfortunately, *The Cardinal of the Kremlin* makes for a rather bland appearance, featuring even more bar graphs than this brief review dares to mention. The occasional graphics are embarrassingly primitive and the sound effects are hardly worth mentioning.

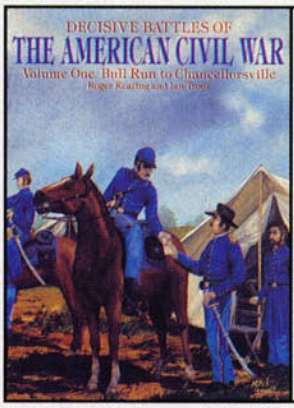
Game options include the ability to save up to three games in progress, although this reviewer experienced considerable problems doing so on an Amiga. The player may elect not to view several animated sequences which depict the satellite system being tested and launched into orbit and sound effects are also optional. Users of the IBM version may choose between keyboard and mouse control, but Amiga players are generally restricted to the mouse (the lone exception being the arcade sequences, when the keyboard suddenly becomes active).

The Cardinal of the Kremlin is an unconventional game to learn. If it is possible to imagine an office overseer examining bar graphs, studying trends and rapidly making decisions on the fly, one can easily imagine the flow of game play in *Cardinal*. Fans of Tom Clancy's novel will find that the programmers have made a genuine effort to convert the book to a game, which is by no means completely marred by the program's less than sterling presentation. *Cardinal* is also recommended for those who have always wanted to rule the world by the power of red tape rather than pure destruction. **cgw**

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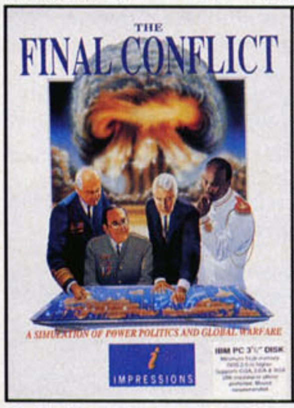
HINT BOOKS

688 Attack Sub	$10
Altered Destiny	$10
Bard's Tale 1 - 3 Ea	$10
Black Cauldron	$10
Buck Rogers	$10
Castle of Dr Brain	$10



'AMERICAN CIVIL WAR VOL 1' from **SSG** is a hex based command perspective war game. It uses **SSG**'s Decisive Battles System which takes into account the fog of war. Six scenarios are included Antietam, Shiloh, First Bull Run, Second Bull Run, Fredericksburg, & Chancellorsville. **WARPLAN** a scenario builder and **WARPAINT** an icon-terrain editor are included. **$22**

Champions of Krynn	$10
Code Name Iceman	$10
Colonel Bequest 1 or 2	$10
Conquests of Camelot	$10
Conquests of Longbow	$10
Countdown	$10
Curse of Azure Bonds	$10
Darkspyre	$10
Death Knights of Krynn	$10
Dragons of Flame	$10
Dragon Wars	$10
Drakkhen	$10
EcoQuest 1	$10
Elvira 1 or 2	$10
Eye of the Beholder 1	$10
Eye of the Beholder 2	$10
Fountain of Dreams	$10
Gateway Savage Frntr	$10
Gold Rush	$10
Hard Nova	$10
Harpoon Battlebook	$19
Heart of China	$10
Hero's Quest 1 -3 Ea	$10
Immortal	$10
Indy Jones Lst Crsade	$10
Indy Jones Fate Atlantis	$10
Keef the Thief	$10
King's Quest 1 - 5 Ea	$10
Knights of Legend	$10
Leisr Suit Larry 1-5 Ea	$10
Loom	$10
Lord of the Rings 1 or 2	$10
Magic Candle 1 or 2	$10
Manhunter NY or SF	$10
Maniac Mansion	$10

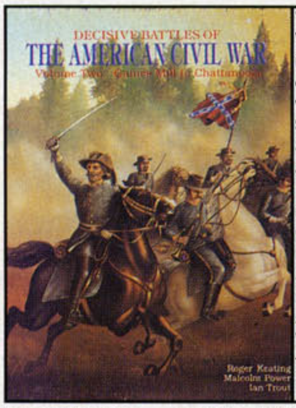


'FINAL CONFLICT' from **IMPRESSIONS** is a strategy game of power politics & global warfare. Allocate resources. Build factories and control food production. Produce armies, tanks, ships, & missiles. Send out spies & conduct diplomacy to uncover military secrets & win allies. Features 95 countries, nuclear winter, optional arcade missile sequence, entirely icon driven. **$34**

Martian Dreams	$13
Martian Memorandum	$10
Mean Streats	$10
Might & Magic 1 - 3 Ea	$10
Neuromancer	$10
Planet's Edge	$10
Police Quest 1 - 3 Ea	$10

HINT BOOKS

Pool of Darkness	$12
Pool of Radiance	$10
Power Monger	$10
Puzzle Gallery	$10
Quest for Clues 2 or 3	$21
Quest for Glory 1 - 3 Ea	$10
Railroad Tycoon	$10
Rise of the Dragon	$10
Run 5 Issue 1 - 19 Ea	$ 5
Savage Empire	$10
Search for the King	$10
Secret Monkey Island 1	$10
Secret Monkey Island 2	$10
Secret of Silver Blades	$10



'AMERICAN CIVIL WAR VOL 2' from **SSG** is a hex based command perspective war game. It uses **SSG**'s Decisive Battles System which takes into account the fog of war. Five scenarios are included, Gettysburg, Chickamauga, Gaines Mill, Chattanooga, & Stones River. Features include **WARPLAN** a scenario builder, and **WARPAINT** an icon-terrain editor. Covered in Run 5 Magazine. **$22**

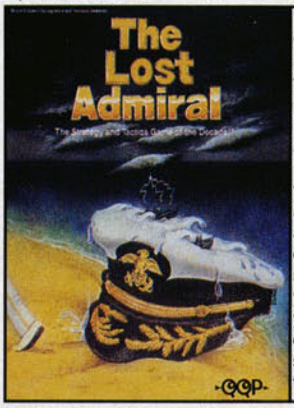
Sentinal Worlds	$10
Shadow Sorcerer	$10
Simcity/Simearth	$20
Simearth	$19
Space Quest 1 - 4 Ea	$10
Starflight 1 or 2	$10
Strategy Plus 3 -11 Ea	$ 8
Strategy Plus 12	$ 4
Tunnels & Trolls	$10
Ultima 4 - 7 Ea	$10
Wasteland	$10
Wizardry 6 Cosmic Frg	$12
Wizardry 7 Crusade	$12
Yeager's Air Combat	$19
Zak McKracken	$10

IBM ROLE PLAYING

2400 AD	$28
Autoduel	$26
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Bard's Tale 2	$19
Bard's Tale 3	$31
Bard's Tale Cnstrctn St	$34
Battletech 1 or 2	$31
Blade Warrior	$12
Buck Rogers	$32
Captain Blood	$ 9
Captive	$30
Castle Master	$34
Conan	$32
Corporation	$32
Cybergenic Ranger	$32
Darklands	$39
Darkspyre	$32
Demon's Winter	$12
Drakkhen	$37
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Dragon Wars	$31
Dusk of the Gods	$38
Earthling	$32
Elvira 1 Mistress Dark	$34
Elvira 2 Jaws Cerberus	$37
Escape from Hell	$17
Faery Tale Adventure	$25
Fire King	$ 7
Flames of Freedom	$28
Fountain of Dreams	$15
Hard Nova	$19
Hero's Quest 1	$21
Hero's Quest 2 or 3	$34
Hyperspeed	$34
Immortal	$27
Journey	$12
Keef the Thief	$16
Keys to Maramon	$25
King's Bounty	$19
Knights of Legend	$30
Lord of the Rings 1	$34
Lord of the Rings 2	$37
Magic Candle 1	$15
Magic Candle 2	$38
Mechwarrior	$34
Megatraveller 1	$19
Megatraveller 2 or 3	$34
Midwinter 1	$24
Midwinter 2	$29
Might & Magic 1	$12
Might & Magic 2	$17
Might & Magic 1 & 2	$33
Might & Magic 3	$38
Mines of Titan	$12
Murder	$29
Paladin	$28
Paladin Scrolls Disk	$16
Phantasie 3	$12
Pirates	$ 9
Planet's Edge	$38
Prophecy 1	$12
Questron 2	$12
Rings of Medusa	$28
Scavengers	$34
Sentinal Worlds	$18
Seven Spirits of Ra	$17

IBM ROLEPLAYING

Shadowgate	$31
Sorcerian	$34
Space 1889	$19
Space Inc	$34
Space Rogue	$30
Spirit of Excaliber	$29



'LOST ADMIRAL' from **QUANTUM QUALITY PRODUCTIONS** is a turn based production naval strategy game. Features 9 sccenarios, a random map scenario, 15 campaign games, flagships with special abilities, very strong artificial intelligence, in depth officers ranking system, accumulates your career history as you play, 2 player option, and sound board support. In short better than **EMPIRE.** **$34**

Starflight 1 or 2	$19
Star Command	$34
Star Saga 1 or 2	$34
Sword of the Samurai	$12
Swrd Samrai & Pirates	$16
Tangled Tales	$21
Third Courier	$12
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Tunnels & Trolls	$12
Twilight 2000	$34
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Ultima Savage Empire	$34
Ultima Trilogy	$35
Ultima 4 or 5	$35
Ultima 6	$39
Ultima 7	$45
Uncharted Waters	$42
Vengeance of Excalibur	$32
Windwalker	$28
Wasteland	$15
Wizardry Trilogy	$32
Wizardry 4	$19
Wizardry 5	$32
Wizardry 6 Cosmic Frg	$37
Wizardry 7 Crusaders	$39
Xenomorph	$32

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Airborne Ranger	$12
Altered Beast	$28
Amazing Spiderman	$15
Arachnaphobia	$28
Arkanoid 2	$24
Armor Alley	$27
Artura	$ 9
Back to the Future 2	$24



MINDCRAFT'S RULES OF ENGAGEMENT is a real time strategic space combat game. Command a starship and an entire fleet with subordinate ship commanders in multiple combat missions. Using **BREACH 2** you can send out boarding & landing parties. A comprehensive mission builder lets you design enemy races, starships, solar systems, even the personalities of ship commanders. **$38**

Barbarian	$ 9
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Battle Master	$37
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IBM ACTION /ARCADE

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Colorado	$12
Continuum	$32
Crackdown	$19
Crossbow	$29
Dark Century	$29
Day of the Viper	$32
Deathtrack	$12
D Generation	$32
Dig Dug	$ 9



'FIRETEAM 2200' from **SIMSYSTEMS** is a strategy game of armoured combat in the far future. Fight alone or command up to 16 armoured units. Over 30 diffferent vehicles with 25 different weapons systems. Features adlib support, 15 scenarios, hidden movement, campaign game, datalink reports from vehicles in your command, line of sight tactical display, and play by modem. **$29**

Double Dragon 2	$15
Dr Doom's Revenge	$12
Dragon's Lair 1	$38
Dragon's Lair 2	$38
Drgn's Lair Singe Cstl	$37
F40 Pursuit	$31
Faces Tetris 3	$25
Finale	$12
Fire Power	$24
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Gauntlet	$15
Gauntlet 2	$12
Ghostbusters 2	$12
Golden Axe	$19

IBM ACTION /ARCADE

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Gremlins 2	$12
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Hard Driving 2	$38
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Knight Force	$31
Last Ninja	$17
Last Ninja 2	$24
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Loopz	$24
Low Blow	$24
Marble Madness	$15
Mavel Trilogy	$39
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Monty Python	$15
Ms Pac Man	$ 9
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Night Breed	$15
Night Hunter	$25
Night Mission Pinball	$25
Night Shift	$19
North & South	$27
Nova 9	$26
Obitus	$37
Obliterator	$ 9
Oil's Well	$21
Pac\ Man	$ 9
Paperboy	$27
Pick N Pile	$28
Pinball Construction	$ 9
Pipe Dream	$19
Powerdrift	$25
Powerdrome	$24
Psychic War	$28
Punisher	$12
Rambo 3	$28
Resolution 101	$24
Rick Dangerous	$25
Robocop	$28
Rotox	$24
Savage	$25
Shinobi	$28
Sidearms	$21
Silpheed	$21
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Space Harrier	$28
Speedball	$28
Speedball 2	$32
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Starglider 2	$29
Stellar 7	$21
Stormlord	$24
Super Off Road	$15
Super Pac Man	$ 9
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Targhan	$28
Teenage Mtnt Nnja Trtl	$24
Tetris	$22
Terminator	$34
Terrorpods	$24
Thexder 1 or 2	$21
Treasure Trap	$10

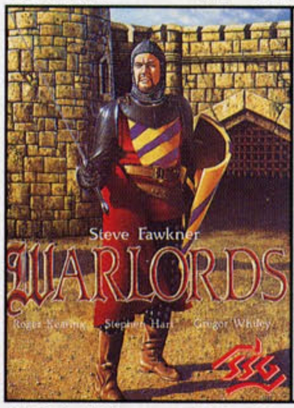
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A10 Tank Killer $26
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IBM SIMULATION

First Over Germany $ 9
Flight of the Intruder $37
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Galactic Conqueror $31
Gunboat $33



'WARLORDS' from **STRATEGIC STUDIES GROUP** is a huge eight player strategy game of empires and armies, castles and heroes, monsters and dragons. Capture cities to increase production. Use your heroes to form alliances. Improve castles and garrison troops to defend your empire. Lay siege to your enemies' castles to destroy his armies. Ambush his heroes to destroy leadership. **$29**

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F19 Stealth Fighter $39
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Volfied $27
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Wild Streets $31
Wrath of the Demon $32



TIGLON'S 'DECISION AT GETTYSBURG' gives you command of either army at the turning point of the American Civil War. Features include real time play, historical accuracy, hidden or revealed movement and 147 square miles of detailed VGA maps. The simulation allows you to combine units, create new smaller units, transfer men or supplies and send out patrols. **$29**

Xenocide $29
Xiphos $34
X Men 1 $12
X Men 2 $25
Zany Golf $15
Zombie $12
Zoom $22

Gunship $12
Gunship 2000 $39
Harrier Combat Sim $12
Heatwave $25
Hoverforce $31
Hunt for Red October $22
Instnt Facilities Locator $28
Jet $12



'RORKE'S DRIFT' from **IMPRESSIONS** is a detailed simulation of the battle between 137 british soldiers & 4000 Zulu warriors that took place Jan 22 1879. You command the British in their attempt to hold out aginst the onslaught. You control each man, standing, sitting, prone, aiming, firing, reloading, running or walking. With 3D map, animated combat & movement mouse support & 256 color VGA. **$34**

Jet Fighter 2.0 $39
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Lightspeed 2 $34
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Mig 29 Fulcrum $45
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S Weapons Mission 1 $45
Shuttle $37
Sherman M4 $34
Silent Service 1 $ 7
Silent Service 2 $34
Skyfox 2 $16
Solo Flight $ 7
Startrek 25th Aniversry $36
Steel Thunder $17
Stellar 7 $21
Stormovik $15
Strike Aces $32
Strike Commander $45
Stunt Driver $32
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King's Quest 1 - 3 Ea $29
King's Quest 4 $34
Leisure Suit Larry 2 or 3 $34

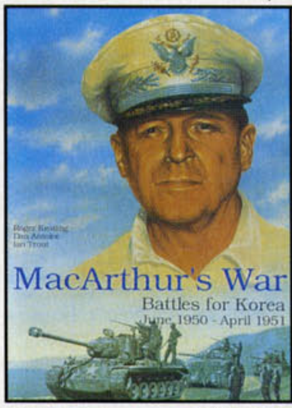


'COHORT' from **IMPRESSIONS** is an unusual wargame using a miniatures style interface to cover combat between roman legions & their enemies. Features animated combat & movement, 7 unit types, infantry, cavalry, & archers, user definable army composition, 4 different maps, scenario builder, stop & give orders real time combat, 256 color VGA, & sound board support. **$34**

Loom $21
Manhunter NY or SF $29
Neuromancer $21
Night Hunter $28
Police Quest 1 $29
Police Quest 2 $34
Sci Mutant Priestess $31
Search for the King $41
Space Quest 1 or 2 $29
Space Quest 3 $34
Startrek 5 $34
Where Europe Carmen? $34
Where USA Carmen? $34
Where World Carmen? $27

AMIGA SIMULATION

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A10 Tank Killer $33
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Battlehawks 1942 $34
Blue Max:Aces WW I $34
Cycles Grand Prix $34
Days of Thunder $34
Dragon Strike $34
F15 Strike Eagle 2 $29
F16 Combat Pilot $34
F19 Stealth Fighter $39
F29 Retaliator $34
FA18 Interceptor $18
Falcon $34
Falcon Mission Disk $18
Gunship $34
Heatwave $28
Hunt for Red October $22
M1 Tank Platoon $39
Silent Service 1 $15



'MACARTHUR'S WAR' from **SSG** is a hex based war game of the Korean war from 1950-51. It uses **SSG**'s Battlefront System which takes into account the fog of war. Eight scenarios are included, Across the 38th, Bulge, Taejon, Chongchon, Nakton, Imjin, Chosin Reservoir, Unsan, and Chipyong. **WARPLAN** a scenario builder and **WARPAINT** an icon-terrain editor are included. **$29**

Test Drive 2 $30
CA or Euro Challenge $15
Muscle or Super Cars $15
Red Storm Rising $30
Their Finest Hour $39
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AMIGA ROLE PLAYING

Autoduel $26
Bard's Tale 1 $18
Bard's Tale 2 $19
Battletech $34
Bloodwych $34
Buck Rogers $32
Champions of Krynn $32
Curse of Azure Bonds $32
Dragon Lord $34
Drakkhen $39
Dungeon Master $28
Eye of the Beholder $39
Federation $34
Fool's Errand $34



'WORLDS AT WAR' by **Lyric Software** is a game of naval combat on a galactic scale. Simple in concept, you can play the tactical study for an hour; or the campaign game for a weekend. Features include random map generation, hidden movemnet, design your own task forces, capture palnets to build more units. **CGW** said "...like **EMPIRE**, what this game has is play-value". **$30**

Hound of Shadow $28
Immortal $34
Lords of Rising Sun $30
Might & Magic 2 $39
Pirates $31
Pool of Radiance $34
Space Rogue $34
Spirit of Excalibur $29
Starflight 1 $34
Starflight 2 $34
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Ultima 4 $39
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Universe 3 $34
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Lemmings $32
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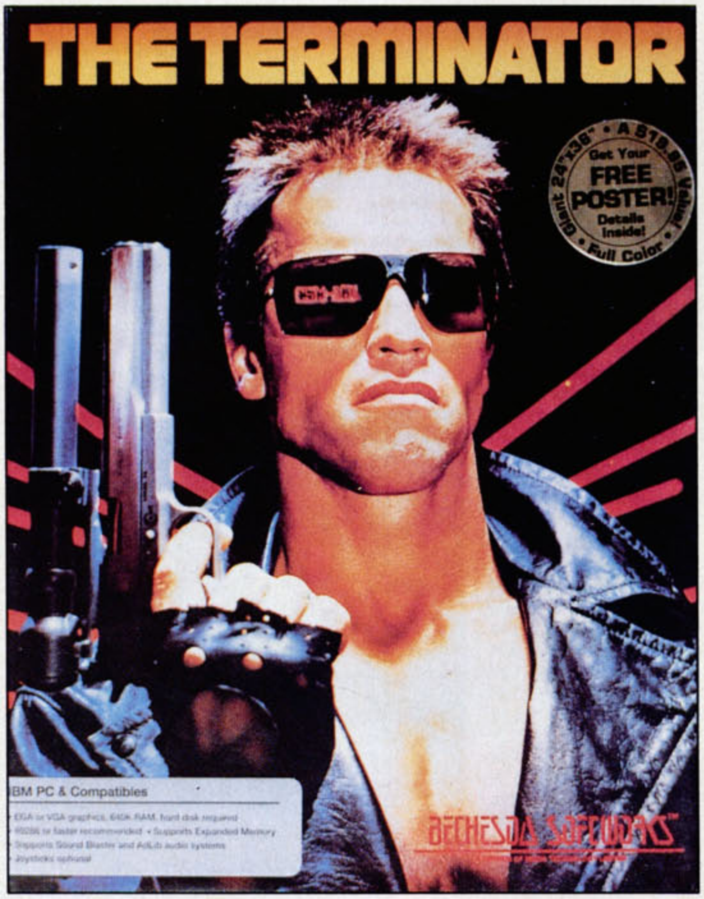
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The Terminator: Robot Rampage in L.A.

by Todd Threadgill





TITLE:	The Terminator
SYSTEM:	IBM
# PLAYERS:	1-2
PRICE:	$54.95
DESIGNERS:	Chris Weaver, Julian LeFay
COPY PROTECT:	Non-repro Look-up
PUBLISHER:	Bethesda Softworks Gaithersburg, MD

Even back in 1984 *The Terminator*, the classic all-out action-adventure movie starring Arnold You-Know-Who as a killer cyborg from the future, seemed like perfect material for a computer game. One can only wonder why designers waited so long to produce a game based on *The Terminator*, but gamers should be thankful that the wait is over. **Bethesda Softworks** has created an action game that does an excellent job of capturing the spirit of the original film.

The Terminator, for those who haven't seen the film, depicts the struggle between Kyle Reese, a warrior from the post-nuclear future, and a "Terminator" model cyborg, programmed to kill human beings. The Terminator has traveled back in time to assassinate Sarah Connor, a woman who will eventually give birth to the leader of the ragtag human resistance army that will defeat the Terminator's robotic creator Skynet, bent on world domination. Their aim is to destroy the human leader before he is even born. Reese's job is to make sure, against overwhelming odds, that the Terminator unit fails.

Back From the Future Revisited

In the computer game, the player may choose to play either Reese or the Terminator. The action takes place on a somewhat fictionalized map of Los Angeles, in a bewilderingly huge 3-D world. There are two further variations on the game—a "Short" version and a "Full" version. In the Short version, players start off the game with a few of the supplies (including weapons, etc.) that they will need during the game. The Full game finds players possessing nothing more than clothing. The former puts one right in the thick of the action and the latter is more suitable for players who enjoy scavenging for goodies in gun shops, sporting goods stores and ammo dumps. The designers also (thankfully) included a Practice mode, in which novice players can familiarize themselves with the mechanics of the game, without worrying about having to face the opposition.

The game's mechanics appear overwhelming at first. There are two basic "modes" of operation—Walking Mode and Driving Mode. Walking Mode applies to one's character walking around the game world which is, in turn, chock full of buildings, vehicles and other people (who serve as little more than Uzi fodder or fender magnets during the game). Of course, when the player steals a car, he or she switches to Driving Mode. The two modes have slightly different keyboard commands, and there is even a third "sub-option," used when the player is piloting a car with a manual transmission. Despite the myriad controls, the game is actually easy to learn, thanks to the inclusion of the Practice game.

The Hunt Is On

Once the player selects a non-Practice game, the action starts. Players view the action from a first-person (first- robot?) perspective. The graphics during gameplay are standard 320x200, 16-color EGA screens (although the map display, opening menus and interlude screens—during which the player is apprised of notable events in the game—are in various graphics modes, including 256-color VGA and high-resolution EGA/VGA). The 3-D world has a slightly chunky, "flight simulator" look to it, although the designers made clever use of the limited color palette through dithering techniques and managed to produce what appears to be a rather wide range of colors and "textures."

The Terminator supports Ad Lib and Sound Blaster sound cards and this reviewer thought the Ad Lib soundtrack was quite good. Those without sound cards catch a break in this game, however, because *The Terminator*'s sound is more than adequate when using the PC's internal speaker. Also, *The Terminator* has the ability to become a two-player game when two computers are hooked together with a null modem cable. While the computer opponent is a formidable challenge—especially at the tougher levels—gamers who are looking for a real challenge should look into the two-player option.

Completing the game is much easier when the player opts to play as the Terminator. Both players have tracker displays that point in the general direction of one's opponent. In addition, the Terminator sports several features that humans like Reese just don't come factory-equipped with, such as sector-coordinate and heading readouts that make getting one's bearings much less difficult. As Reese, the player does not have to find Sarah Connor (she's standing at arm's reach as the game begins), but one must devise a way to protect Sarah and destroy the killer cyborg that could be lurking around any corner. When taking the Ter-

minator role, the game is more of an action contest, while playing Reese provides more of a staggering strategic challenge.

Sector Readouts (Evaluation)

There are a couple of technical quibbles. On this reviewer's DOS 5.0 machine, *The Terminator* refused to start until DOS=HIGH was removed from the CONFIG.SYS file. Once this was done, however, the game booted without incident. Bethesda Softworks is aware of this problem; their advice is to use DOS 5.0's LOADFIX command. Also, from time to time in the game, players will encounter strange floating pieces that simply do not fit into the current surroundings. They do not detract from gameplay, but give the game a somewhat unfinished appearance.

Overall, the designers of *The Terminator* have done a commendable job of capturing the thrilling spirit of the original movie, while allowing players enough freedom to create their own version of the story. The non-stop action of the movie has been distilled down into a classic chase game that has all the elements necessary for success.

Man Versus Machine (Strategy Tips)

Strategy depends on the role one plays, just as in real life. As the Terminator, one can simply make a beeline for his or her target and emerge from nowhere with guns blazing. Alternatively, Reese must use stealth and speed as the keys to success.

Regardless of the character one chooses to play, reading the manual is essential for a successful mission. The manual contains vital information that can easily make the difference between winning the game and wasting one's time wandering aimlessly.

Terminator Strategy: Guns and ammo are really all that's needed, but be sure to grab plenty of ammunition while tracking Sarah down. When she is finally located, she will be surrounded not only by Reese, but by police and the military. These allies can inflict considerable damage. Even without them, however, Sarah herself is incredibly tough to take down: she can take fifteen to twenty direct hits, and when under attack, she dances wildly around like a moth near a light bulb. One must keep the Terminator's energy focused on Sarah. Even though bonus points are awarded for terminating Reese, he is only a secondary target. If a choice must be made between the two, Sarah is the logical one to go after.

A quick cheat for the Terminator player (*Warning*— this should not be read by those who don't believe in cheating!): Since the game map is completely flat (and there is no penalty for driving over lawns and gardens), it is logical to simply steal some weapons and ammo (the game offers players the chance to buy things, but where's the fun in buying something when one is a killer cyborg?), steal a car and speed toward Sarah for a quick victory.

Reese Strategy: One should use time wisely by moving quickly and making the most of every second. It is optimal to steal a car or van and head straight for one of the ammo dumps on the map. Then one can load up on grenades, rocket launchers, etc. Guns have little effect on the Terminator, and he can turn up at the most unexpected times, so victorious heroes must be prepared. Finally, while Reese can tell Sarah to stay put or run away, it usually isn't a good idea to be away from her for too long. If the humans stick close together, there may yet be hope for the human race. **CGW**

Unveiling the *Secret*

by M. Evan

Secret Weapons of the Luftwaffe (*SWOTL*) is **Lucasfilm**'s follow-on product to the very successful *Battlehawks: 1942* (*BH*) and *Their Finest Hour* (*TFH*). Covering the air war in Germany between 1943 and 1945, it is in fact three games in one: (1) the flight mission (either historical or player-created); (2) the tour of duty (patterned after historical tours, in which the player must survive a certain number of missions) and (3) the campaign (in which the player's mission successes or failures affect the course of the war).

Initially scheduled for a Christmas 1990 release, *SWOTL* was finally released on 20 August 1991, thereby causing much anguish and teeth-gnashing by a vociferous public. While this reviewer was not annoyed by the delay (since he was involved in a different type of "wargaming" experience), the complaints about the delay do necessitate a delineation of what has been added in the interim. Much of this differentiation has been taken from discussions with Lucasfilm and an August press release.

- *SWOTL* has three campaigns, each with three levels; *TFH* had one.
- The tour of duty is new. While the initial release date called for one to two tours per side, the current release has eight American and five German tours.
- Visual effects have been enhanced, to include more ground detail, chain-reaction explosions and new animations (to include bullet holes, oil leaks, etc.).
- Flight dynamics are "more realistic" and there are two levels of flight controls (standard and advanced, the latter utilizing rudder/aileron input).
- The viewing system has been expanded, to include eye-level, 45-degree high view and straight up.
- Replay modes have been expanded, and up to two megabytes may be saved.
- Weapons systems now include rockets and ground strafing.
- The geographical data base covers from England to Czechoslovakia.
- Where *TFH* covered three months of action, *SWOTL* covers a two-year time period.
- Scoring has been overhauled.
- Expanded memory support is now available.
- Artificial intelligence routines for the computer pilots have been made more sophisticated and, hence, more difficult to defeat.

Given these changes, was the wait worth it? That will be an individual decision. Many users will not be satisfied simply because their expectations have risen to an unrealistic level. Much of this review will compare and contrast *SWOTL* with the two state-of-the-art flight simulators currently available on the market — **Electronic Arts**' *Chuck Yeager's Air Combat* (*CYAC*) and **Dynamix**'s *Red Baron* (*RB*).

Warning: *SWOTL* requires a fast machine. While this reviewer's 386-20 was capable of accessing the simulation, ground detail was suggested at medium level. A 25- to 33-MHz machine is optimal, and a 10-MHz machine may well be too slow. These requirements are stated on the box and it means what it says!



TITLE:	Secret Weapons of the Luftwaffe
SYSTEM:	IBM
REVIEWED:	386-20 w/AdLib Board
PRICE:	$69.95
COPY PROTECT:	Code Wheel Look-Up
DESIGNER:	Lawrence Holland
PUBLISHER:	Lucasfilm Games San Rafael, CA

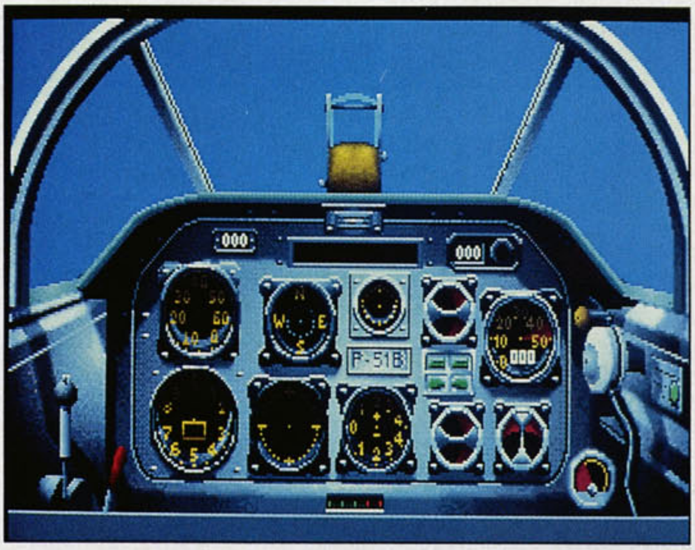
Documentation

As per Lucasfilm standards, the documentation is superb. Over two hundred pages in length, most of it is an excellent historical study of the air war over Germany. In fact, the first eighty-three pages are a historical overview and this monograph is a fine addition to a historian's library. The bibliography (with over forty entries) and suggested reading list are appreciated.

Actual game instructions are covered in depth in the manual, but a succinct "Reference Guide" reproduces the actual "hot keys" in a four-page summary. A detailed "German and U.S.

Weapons of the Luftwaffe

Brooks





Aircraft and Weapons" section should be carefully studied by the serious player. Knowledge of climb rates and maximum speed of various platforms should prove life-saving. However, there is no "Tactics" section a la *CYAC*, in which a visual display of friendly aircraft and likely opponents is contrasted along with optimal tactics.

Each cockpit is fully illustrated and explained. Since all instruments do have a function, they must be understood and monitored. The documentation makes such comprehension easy to accomplish.

Of course, there are some omissions. While the documentation notes that *SWOTL* supports keyboard, mouse and joystick, one will learn that the keyboard must be used for certain purposes. In particular, using the joystick to access a flight from the briefing map is impossible. One must use the space bar for this purpose, as well as to check on a ground site. This may seem a minor concern, but it did initially confuse this reviewer.

Graphics and Sound

Graphics seem to be a very personal preference. Many users prefer *CYAC*'s polygon graphics to *SWOTL*'s polygon shadings and bit-maps; this reviewer preferred the graphics of *RB*. However, *SWOTL*'s graphics are detailed, colorful and extensive. They do represent the state of the art in the Lucasfilm mode, and the campaign maps with their ability to zoom in (a la **Spectrum HoloByte**'s *Tank*) and pick out a particular airfield, industrial site or flak battery are impressive.

The depiction of ground damage is excellent, in that explosions can engender a chain reaction. This effect is best captured "on film" and, from different perspectives, one can literally see the explosions, smoke and fire expand and coalesce into a massive portrait of destruction.

Air damage is carefully depicted and one can observe large pieces of fuselage and wing breaking off from hapless B-17s. A word of advice: perusal of damage should be through camera replay; watching a bomber slowly drift out of formation and begin a death dive may be artistically satisfying, but it is a quick way to lose situational awareness and incur massive damage. Such damage to one's own machine can result in hole-stitching across one's canopy or wings or, even worse, an oil leak which gradually obscures one's vision through the canopy.

Still, both *RB* and *CYAC* had "red-outs" and "black-outs" (depending on the situation). *SWOTL* features neither phenomenon.

The sounds are quite varied on the **AdLib** and several other sound boards are supported. However, the engine noises seem somewhat muted. This reviewer's personal objection was to the "Symphony in 50-Calibre." This "symphony" occurs whenever one's plane incurs damage and seems more reminiscent of a piano riff than combat damage. Dynamix's *RB* had much more effective aural damage and its sound did reflect that of a bullet striking one's aircraft — a minor point, but one that does lend credence to the "illusion of reality." The background music is striking — a jaunty Sousa-esque military march for the Americans and a Wagnerian-type theme for the Germans.

Game Mechanics

Flight mechanics may be standard or advanced. The standard mode automatically coordinates ailerons and rudder, while the advanced mode allows separate rudder control in order to simulate yaw and pitch maneuvers.

Initial flight is easy to accomplish, but successful combat missions require a long learning curve. Fighter planes have one position, while bombers have a total of nine (pilot/co-pilot, bombardier and eight gunners). Each position may be set to automatic, although one will have to assume the pilot position in order to make course changes. Otherwise, one's B-17 will continue flying on the previous course deeper into enemy territory.

Of course, controls are much easier for fighters, since there are fewer engines and crew. Nevertheless, the bombers, while less maneuverable, require familiarity with the crew positions so that

one can quickly switch to a threatened positions and destroy the incoming aircraft. The automatic gunners do a credible job, but they tend to waste ammunition. Also, the joystick is very sensitive, perhaps too much so, and must be recalibrated each time one boots the game. Why didn't Lucasfilm use an automatic calibration a la *RB*?

Landings are more difficult than in *TFH*, especially in the Me-163. This aircraft was more akin to a Roman candle than a fighter aircraft and its volatile fuel was as much a danger to its pilot as the aircraft was to the Allies. Climbing to maximum height by using all one's fuel, then gliding back through enemy bomber formations in an attack and, finally, landing in a "controlled crash," lead one to the conclusion that this was truly a plane designed in desperation. Landing on a skid requires a delicate touch, and an uneven landing will result in a massive explosion with the fuel remnants combining to produce a true Gotterdammerung.

While aircraft capabilities are printed in the manual, it is difficult to determine the accuracy of the flight mechanics in the simulation. Unlike boardgames (where one can study and determine the accuracy), a computer simulation requires one to accept much on faith. *Red Baron* allowed players to layer on complexity in various levels (e.g. realistic flight, weather, collisions, etc.). This reviewer would have preferred such treatment herein.

Game Play

As noted earlier, there are three aspects to *SWOTL*: tactical, operational and strategic. The tactical aspect involves single missions, and provides the basic structure for the game. Historical missions are included for each aircraft (German: Bf-109, FW-190, Me-163, Me-262, Go-229; American: P-47, P-51, B-17).

While *SWOTL* allows one to jump into and fly an aircraft, its computer opponents do not allow one to survive for long without a grasp of tactics and situational awareness. These opponents are smart, and a simple loop or split-S will rarely lose them. In attacking the bomber formations, *never never never* attack from the rear. This allows the top turret gunner, tail gunner, and ball turret gunners an easy target, and the massed bomber formations can provide a veritable "wall of steel." The optimal target approach is from the front and above; one should engage at maximum distance, and then jink around for another high-speed pass.

Two learning tools should be used in order to gain familiarity: the camera replay and the end-of-mission status report. The former will allow one to view from the target's perspective, and one can observe the actual trajectory and impact of one's shells. The end-of-mission status report will show what percentage of hits were achieved. Both devices should be used so that one can understand and appreciate the optimal range for attacks. Close-in assaults generate too much damage, and the idea is to cause massive bomber damage, not merely a single kill.

Rocket attacks are the horseshoes/grenades of *SWOTL* (i.e. "close only counts in horseshoes and hand grenades"). While aiming is somewhat rudimentary and the rocket must be "lobbed" over the target (as it was historically), a successful rocket attack is the best thing for breaking up a bomber formation.

Closure rates are very swift, and one must be aware of when to "jink away" from engaging. Altitude does not have as serious an effect as one would expect, but each plane has its own strengths and weaknesses; designer Lawrence Holland prefers the Go-229 — the "dream plane of the Reich." While its flight parameters may be interesting, this reviewer prefers those aircraft that did engage in the historical war. Again, this is a personal preference.

The operational aspect (Tour of Duty) is similar to **SSI**'s *Fifty Mission Crush*, *B-24 Combat Simulator* and *First Over Germany*, though it, in fact, supersedes them with a graphically intensive and detailed database second to none. A tour of duty can vary in time (as it did historically), and a maximum of five such tours can be completed by the same crew/pilot. Historically, an American would be rotated back to the ZI (Zone of the Interior, i.e. the United States) for a bond tour or as an instructor, while a German would have to keep flying until the conclusion of the war.

The campaign allows one to change the course of the war. This option was premiered in **MicroProse**'s *Red Storm Rising*. In a hypothetical war, this reviewer has no problem. However, in a simulation of an actual conflict, the impact of micro-missions affecting the macro-strategic theater is more uncomfortable. Granted, it can be fun, but is it "real?"

The campaign aspect is reminiscent of **SSI**'s *USAAF*, but much less intensive in scale. This reviewer would have preferred an option to fight the campaign from the Air Marshal's table instead of the cockpit. If one does fly a German campaign, emphasize the FW-190 and the Me-262. The Me-163 and Go-229 are too industry intensive and yield less bang for the buck.

No matter what level a pilot flies, there are certain steps to achieve mission success. Beginning with a novice crew accompanied by novice pilots is a step toward a quick death. One should use the mission generator, and develop several introductory and moderate-level of difficulty missions in order to "blood" the pilot/crew. Once a degree of aptitude is achieved, such pilot/crew should be cloned to create a pool of experienced pilots and crews for accompanying one into combat.

The camera replay should be used often. While it is capable of filming entire missions, it does not have *Red Baron*'s ability to reenter a "film" and pick up the action from a certain point. This reviewer did not realize how difficult such a feature is. After all, what could be so hard about capturing a scenario and replaying it? In terms of computer programming, it is difficult, and one must be careful to prevent the film from replaying a scenario differently than it initially occurred. Lucasfilm will have this feature in its next release (most likely the Pacific).

Finally, *SWOTL* has been designed as a basic engine, capable of expansion. The first expansion disk will cover the P-38 Lightning. Hopefully, others will include the German Ta-152 and the Dornier-335 as well as the American B-24.

Conclusions

Secret Weapons of the Luftwaffe is a welcome addition to Lucasfilm's World War II aerial oeuvre. Graphically rich, stylistically complex and user-accessible, it succeeds on three levels (tactical, operational and strategic).

Yet (there is always a yet), this reviewer would note some personal reservations. *SWOTL* is primarily a simulation of fighters and bombers. The pure fighter-versus-fighter scenarios of *BH* has receded to lesser importance. One can create these in the scenario generator, but as a function of history, this simulation postulates the period when such duels were of lesser importance. *BH* and *THF* were easier to learn and play. *SWOTL* requires extensive playing in order to learn the best way to attack and defend the massed bomber formations. In fact, *TFH* and *SWOTL* remind this reviewer of the differences between *Sidekick* and *Sidekick Plus*. The former product was a quick-and-easy add-on. The latter expanded the parameters of use but at the cost of added complexity. One must be aware of the trade-offs. **CGW**

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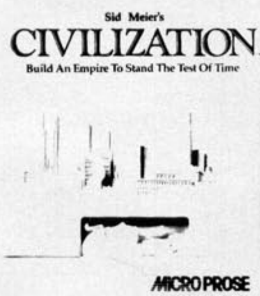
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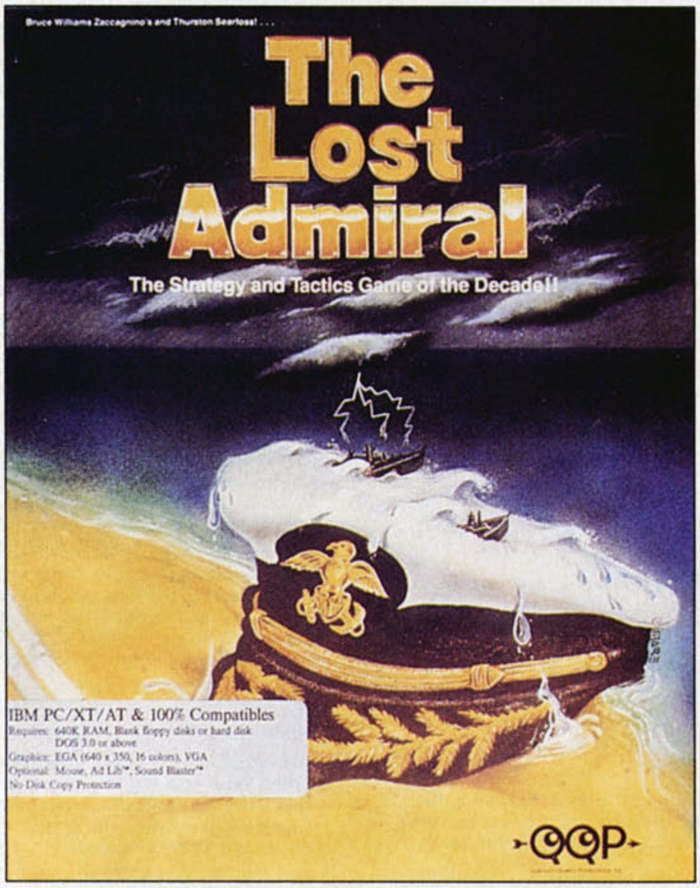
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Taking the Seas With QQP's *The Lost Admiral*

by Dave Arneson

The dads say, "Strategy Game of the Decade." "Arrgh and shiver me timbers, we'll see about that," says I! Interestingly enough, however, they may actually be right. At first glance, the game's look and interface seems amazingly like that of *Empire*. So, since *Empire* is a former "Game of the Year" winner, the present reviewer expected the comparison of *The Lost Admiral* and *Empire* to be quickly consummated in a deft nod to the more venerable game. Even the concept in *Empire* seemed grander and, potentially, more satisfying, since *Empire* had both land and air forces, as well as naval units and *The Lost Admiral* (*Admiral*) deals only with the naval environment. Anomalies immediately came to this reviewer's mind: players could have such unrealistic situations as those in which both sides have a major base on a island, yet are unaffected by each other.



On the other hand (and that is a *big* "other") *Admiral* has a depth and variety to its play that *Empire* does not have. In fact, it is variety with no apparent end. Just when one thinks the AI is outsmarted, it manages to come up with something else. After a week, this writer found himself up to third level with his business associate (not Gary Gygax) creeping into fifth. This, after a mere fifty games or so! Considering that there are ten levels of difficulty with a dozen sub-levels within each of those, this means there is a significant amount of replayability in this game. Further, even these sub-levels have a built-in randomizing factor that makes each game very different.



Getting Commissioned

The operational interface is generally quite smooth and the game is easy to get into without reading the manual, especially since the "Learning" game allows one to practice tactics without penalty to the player's potential career as an *Admiral*. Part of the reason the game is rather easy to get into is because everything is kept to a functional level. The graphics offer some color and are adequate to the task. Hence, ship icons are easily recognizable as Battleships, Carriers, Cruisers, Destroyers, Submarines, Attack Transports, and Transports and the animation is limited to observing shells fall on ships, watching those ships sink or "burning ship" icons.

As additional assistance to the novice player, the documentation is superior to the reference materials found in many games. It is short and helpful, containing a list of all commands (also available on a pop-up screen in the game) and color copies of all the standard maps. The maps are essential for scoping out one's strategies and the commands are essential for taking any action, since the game is menu-driven (except for actual movement) and fairly straightforward. There are still some rough spots, however. The submarine rules are not fully explained and the material on ship construction is skimpy, to say the most. (Maybe they could have used the space invested in the far-fetched fiction behind the "Lost Admiral.")

Spread Over the Map

Maps vary in size, depending on the scenario, and there are nine "standard" maps in addition to a random map generator. The campaign games use a mixture of random maps and the standard ones. In appearance, the tactical map is both functional and colorful. Use of the tactical map is facilitated by the delineation of the area being represented by the *tactical* map on a small rendering of the strategic map, located in the upper right hand corner of the screen. The small rendering also shows the location of other ports and which side owns them. By clicking the mouse on this smaller map, one can quickly change location and facilitate tactical movement. There is also a less detailed map that can be accessed for movement. This map shows a much larger area in order to expedite long-range movement, even if the abstract lines

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used are less pleasing to the eye (though easy to identify).

In the single scenarios, one can choose the ships that will make up one's fleet from a "price list." The price list displays what ships have already been purchased and which of these are in the particular port currently displayed on-screen. One can go back and change all of this at any time before actually starting to play the scenario.

All Hands to Battle Stations

Combat is very straightforward. Only two ships (maximum) can fight each other at one time. The player's only tactical option is to determine which target to shoot. When there is only one possible target (subs may or may not be targets, but more on that later), the fire is automatically performed by the program.

The effect of fire on a target is shown on a pop-up menu and these do not change. So, a battleship will always score four hits on another battleship. The only time the fire will score more hits is when a carrier is "in support." Then, one additional hit is scored for each ship the player has targeted at the same enemy ship.

So if two carriers are supporting a battleship, it will do six points of damage whenever it is shooting at another battleship. Carriers cannot attack from a distance but can only support other ships from adjacent squares.

Rats in the Bilge? (Criticism)

Such factors as this inability of carriers to perform offensive operations create some of the oddities about *The Lost Admiral* that turn it from a military simulation into a strategy game. The authors are quite open about such apparent oddities and make no pretensions that this is a "simulation." They are quite open in the documentation about many of the decisions that they made and why. There are some, like carriers, that seem quite odd.

Another peculiarity that keeps *Admiral* firmly in the abstract strategy camp is the fact that a damaged ship still has full movement and full offensive capability. One would have expected the crippled enemy to be, at least, reduced to half efficiency.

Even casual gamers will also wonder why it is not possible to repair damaged shore batteries or, for that matter, why the player cannot select where to build them. I suspect the latter is to prevent the naval equivalent of the Maginot line from being built across too many of the narrows.

Gamers may also be inclined to wonder about the lack of shore-based air. As it is, the enemy seems to have a real knack for sneaking through one's pitiful defense without having any CAP to fall back upon.

Tactical Command Readiness

Almost all the games will revolve around which ports are controlled. This makes the set-up and opening move *very* important. An admiral without sea room is going to be in big trouble. If it is not possible to bring superior firepower to bear, it is going to be difficult to win battles. Admirals will also want to have access to as many cities as possible. It may seem tempting to start in the middle of everything, but it is more important to control a number of cities than the number of areas on the map.

Perceptive admirals will also watch the way their ships are "stacked" in a port. While only two ships can occupy the same piece of ocean, any number can be in a port. However, it is the first two ships which will perform the combat operations should an assault be mounted against one's port. So, it is an exceedingly good idea to make certain that the best ships (in terms of both firepower and condition) are the ones which will do the fighting.

Now, Hear This

In case the reader has not gathered by now, *this* reviewer simply cannot stop playing *The Lost Admiral*. The after-battle report has to read that this little gem of the ocean is not only going to be a permanent addition to the writer's hard drive, but several copies will be purchased as Christmas gifts for valued friends. What more can be said? *The Lost Admiral* is simply a *brilliant* first effort by a new company. Naval strategists who are afraid to purchase such a first effort are sunk. Those discriminating enough to make the acquisition are sure to find their tours of computer combat duty being voluntarily extended over the months to come. **cgw**

Letters from Paradise

Promotion Emotion

How about an editorial / article about "pie in the sky," no-show software? Should companies advertise what is not available months ahead of time? Flipside: What about the difficulties encountered by companies in projecting release dates?

R. Tor
Yonkers, New York

I must take issue with your response to a letter in issue #86 that "unprofessional nagging" would not help the development process of software developers who advertise new products in your magazine which do not yet exist. Discussion of the problem could be very constructive

I think that *CGW* is too closely associated with the software industry to view this issue from the perspective of the consumer. You have access to certain software prior to publication (playtest versions for review); are in constant contact with the publishers and are well-informed about the various stages of development and problems that a software project is undergoing. We, the consumers, on the other hand, are "flying blind" with little or no information.

When was the last time you browsed in a software store? The average game buyer gets *his* information from store displays and, if he is smart, reads your magazine for balanced reviews and industry news. The only problem is [that] the products advertised in *CGW* are often not available in the stores and release dates given out by the store or the publisher are extremely unreliable. Some products can run one to two years behind schedule! (*Harpoon*, *Secret Weapons of the Luftwaffe*, *Falcon 3.0*, etc.). For over two months, I have been staring at an empty cardboard box of *Gunship 2000* in the stores. In addition, I received an offer in June from **Microprose** that if I purchased through the mail I would have the product in July, two weeks prior to shipment to the stores. Last month, I called Microprose and was told release was "end of August." Today, I am told by a store clerk that it is "vaporware" and they have been advised [shipment will] possibly be "end of September." I drive to a software store every week looking for new software advertised in your magazine that it turns out is not yet released. As a consumer, this is very frustrating.

Your points about new technologies and "new problems in the programming and production process" and the 3- to 6-month lead time inherent with publishing the magazine are well taken. This does not mean that you should not attempt to assist your readership to be better informed about the status of new software titles.

I recommend two ways to improve the accuracy of advertising in *CGW*:

First of all, when a publisher contracts for advertisements prior to the finished product being available, a **bold** disclaimer should be placed at the bottom of the copy. It should state: "*At press time, this product was still under development. Consult the publisher or your local retailer for availability.*"

Second, *CGW* should strongly consider a column devoted to works in progress. **SPI**'s *Strategy & Tactics* magazine used to have a column devoted to telling you what stage of development a boardgame was in. *CGW* could run down "what's in the works" at each major software house and briefly fill in the readers about the status of various titles. Even though your copy may be 90 days old by the time the magazine hits the racks, software projects can run 12 to 36 months from inception to completion. I would rather have dated information on a title I am interested in than be misled by an advertisement. One of your mail-order advertisers displays the estimated "coming soon" month of release for hot titles. *CGW* should be assisting readers directly with this information.

Finally, if the life of a software development team has become so complex that a game that was announced and advertised for sale one year ago is still not in the consumer's hands, perhaps we could hear more in *CGW* about the technical problems new titles have to overcome in order to be completed. I would enjoy reading an article by the designer of a hit program that focused on the hurdles that had to be overcome in order to bring the title to market and what the linear process consists of [in order] to go from concept to disk. The recent piece on *Rules of Engagement*'s user interface was good, but only scratched the surface of this subject.

My own uneducated *perception* of the problem is that developers create wonderful simulations and games and then spend an inordinate amount of time de-bugging and making the package fit inside the memory/speed requirements of the consumer's machines. No doubt this is far from the truth, but I would love for *CGW* to educate me as to *why* programs take so long to bring to market.

Simon Smith
West Palm Beach, FL

In an effort to impress upon our readers the intricacies involved in developing today's software, we urge readers to look at the article on "The Human Cost in State-of-the-Art Game Design" in this issue. It may clarify some of the development hurdles which software publishers are facing. As for modifying the advertisements, that suggestion does not take into consideration either the lead time in creating the graphic elements, the cost of making extra film or the capacity for logistical mix-up. Actually, readers should probably view all *advertisements in computer magazines as being subject to the suggested disclaimer. We would also suggest that people in Simon's predicament use the telephone prior to driving down to their local software store. For a slightly different slant on this problem, read the following letters.*

Promotion Devotion

I really enjoy the magazine and esteem it as "the professional journal" of computer gaming. I enjoy the review articles and particularly like the articles which discuss the professional side of gaming. Examples would include such articles as the coverage of round-table discussions at conferences and articles concerned with ethical questions in gaming. Of course, the technical and "gee whiz" articles are also part of this coverage. Like others who have recently written you, I would also like to see more "concept to finished product" coverage like that with *Willy Beamish*. Such coverage could also help ease frustration by way of explanation when games miss their release by months (or a year in the case of *SWOTL*). Keep up the writing standards! There is no excuse for poor prose or bad code.

Philip Cockrell
Columbia, South Carolina

One can certainly sympathize with Daniel Stowell's (Letters: September, 1991) feelings about the continued slippage of major game release dates. He is correct when he suggests that the general computer magazines often lambast their advertisers for prolonged delays. However, because of the major differences between the entertainment and productivity software markets, I feel he has missed the critical difference between business and entertainment software.

Business software users tend to only use one program of each type. The decision to replace a product with an new one is a major and, often, painful decision. The software companies know this and will use press releases and private demonstrations to create an environment that will preempt firms from switching to a new product. A fictional example of the effects of such a preemptive strike would be:

A corporation has standardized on *OK-Calc*, the industry leading spreadsheet with 500 users trained to use it. The corporate computer manager tests the latest version of *AmazingCalc* and concludes that its new features are so vital to user productivity that the company will undertake the painful and expensive transition to the new product. (The training costs involved in moving to a new product usually vastly exceed the cost of the software.) The next day, he reads a press release in a computer magazine that has **OK Corp** announcing that the new, soon-to-be-released versions of *OK-Calc* will have all the features of the current release of *AmazingCalc* plus several more. The writer, who has seen a demo of the new product, says it will be shipping next month.

Our corporate manager is thrilled. His problem is solved and *AmazingCalc* loses 500 sales. Fourteen months later, the new version of *OK-Calc* ships, minus some of the promised features. Our manager fires off a nasty letter to the offending writer and the magazine itself, chiding them for their participation in what he sees as a major malfeasance on their part. Hundreds of other persons in similar positions do the same thing.

The writers and editors of general circulation computer magazines are sensitive to the fact that they are often manipulated by computer software manufacturers. Their hostile responses to repeated delays are driven by concern for their readers and a justifiable skepticism of the often cynical announcements of release dates and features.

Game vendors have a different situation. Players purchase games they want according to their personal budget and product availability. **Lucasfilm** knows that advertising *Secret Weapons of the Luftwaffe* too early will send buyers into stores who will probably walk out with something else (like *Chuck Yeager's Air Combat*). Some of those buyers will buy *Secret Weapons* eventually, but in the meantime, their software budget is going in directions that will not help Lucasfilm's corporate income.

While pre-release information can stimulate interest in a new game, it is not in any game vendor's business interest to mislead the press or the public. While the game player is waiting for the fun and excitement of a new game, the game company is deferring millions of dollars of potential revenue, losing some of it forever. I suggest that it is more appropriate for readers to feel sympathy for vendors with late products. Companies that miss too many release dates have a way of becoming "late" in a more ominous manner.

CGW's editor is correct when he asserts that bashing software companies will not speed

release dates or improve products. I suspect that the editors of computer magazines would agree. The basic motivation for their skeptical hostility seems to be best summed up by Rodger Daltry when he wrote: "We don't get fooled again!"

John A. Bertoglio
Newberg, OR

P.S. A wise person observed that if computer programmers and their employers were capable of *realistically* estimating the time a major software project would *actually* take to complete, then *no* projects would *ever* be undertaken. We should be pleased that crazy and talented persons and the firms they work for continue to take an "unreasonable" view of the time these wonder projects will take!

John has summarized our position on the debate so well that this will be the last letter we publish on this discussion.

Calling a Wargame a Wargame

I suggest you classify *Warlords* as a strategy game, rather than a wargame. The game is great, but the combat is not realistic.

Chuck Greenwald
Dayton, Ohio

I am a long-time player of computer games and a long-time reader of your magazine. It is my opinion that *CGW* is the very best computer gaming magazine and I've all but two issues to prove it. Certainly, I confess, the main reason I think so stems from the fact that I rarely disagree with anything I read therein, but also the news, reviews and information have much to do with my enthusiasm, as does an uncanny ability to cover the games I find interesting.

One of the features I most anticipate each month is the Top 100 Games *[Ed: Now "The CGW Poll."]*. I look forward to seeing the changes in rankings and ratings, reflecting the readership's changing opinions.

In recent issues, however, I have noted a definite "fuzziness" of thinking relating to the assignment of games to their specific categories in the categories I care the most about: Action, Strategy, Simulation and Wargames. In a time when wargames are a genre fighting for survival and definitely in need of recognition specifically of their own, the "Top Wargame" is *Warlords*, a magnificent game, but a Strategy game, not a wargame—even by your own definition (*read it!*). Why is *Red Baron* only a Simulation when *Their Finest Hour* is Action/Simulation? Why is *Knights of the Sky* only a Simulation, as well as *Red Storm Rising*, while *M-1 Tank Platoon* is a Simulation/Wargame? [Why is] *Warlords* a wargame and *Command HQ* a Strategy game? I know categorizing games is sometimes a tough call, but exercise some tradition and consistency, please!

You may have guessed that I am a wargamer, at heart. I rejoice that the "Gold boxes" exist so **SSI** can continue to publish a few wargames a year (*I'm kidding!*). Actually, I'm writing because I believe my criticism is justified.

Jeff Walter
San Jose, CA

As noted in this issue's article on the "Game of the Year" awards, 1991 was a year where it took a little something different to get a computer wargame on the shelf. Even the designers of Warlords *will admit that the game is essentially a wargame in a fantasy wrapping. They believed that it took such camouflage in order to convince sufficient customers that wargames can be fun, too. As we noted in the initial review, the game teaches the basics of combined arms tactics.* Command HQ, *co-winner of "Wargame of the Year" with* Warlords, *is now recognized as a wargame. Their* Finest Hour *is considered an action game first with simulation elements and* M-1 Tank Platoon *is considered a simulation first, but a wargame because the player has a command perspective. When in doubt, look at the first category listed.*

The CGW Poll, By the Numbers

More games should be rated on this card each month. Also, add a column to the rating chart which says if a game is climbing or dropping in rating.

Tim Bernaden
Chicago, Illinois

More games equal less responses. Less responses equal less useful information. That is the reason behind the limited number of games rated each issue. Check out the new format for "The CGW Poll" in this issue, though.

Ratings Hysteria

Congratulations for having the best computer gaming magazine. Your sneak peeks, industry news and previews are my favorites. One change? Maybe the authors of reviews could clarify their overall opinion by a 0-100 rating? I have been gaming since its birth and I find your knowledge of its "history" enjoyable.

Shawn Shafai
Highland Park, Illinois

How do you translate our alphabetical rankings into a numerical rating?

Tim Taylor
Bullhead City, Arizona

Each grade has a numerical value which is calculated on a spreadsheet. We believe that the ratings of the readers are far superior to the ratings which could be given by an individual reviewer, even the publisher (and he's been around how long?).

Political Incorrectness

I generally consider your magazine to be a responsible one which does not view all computer gamers as male. Unfortunately, there are a number of sexist references in the current issue [#86. They include:] "interface one's grandmother could learn," (p62) "the player... his goal," (p96) "get... a couple of wives...," (ad p40). I do appreciate that most of your reviewers don't assume I'm male and will mention if it's possible to be a female character in the game.

Victoria Somogyi
New York, New York

With 98% male readership in a male-dominated industry, we are bound to revert to "manly" references on occasion. I think our regular readers will agree that we make a concerted effort not to be sexist in most of our articles. We even have a higher proportion of female writers than we do female readers, for example.

You Can't Please Everyone

This is a great magazine! I can't think of anything to improve it, except maybe replace "Taking a Peek" with something more interesting. Keep up the great work!

David Eison
Orlando, FL

I can't stand the format you use in "The Rumor Bag." Please, just state the facts and

use the extra space for something else. *Anything* else!

Unsigned
Baltimore, MD

"Taking A Peek" and "Rumor Bag" are two of our most well-read columns. Many professionals in the industry tell us that they turn to the "Rumor Bag," first. We know readers have a love/hate relationship with the fiction. We know the fiction is often contrived. We like it. We're keeping it until the bag rots off the guy's head.

Sinews of War

I enjoy running descriptions of battles played (such as the *Command HQ* articles several issues back) and would like to see more of that type.

Also, I would be very interested in seeing articles that talk about game design and implementation. For example: Do game designers use ray-tracing with their graphics? Or maybe some detailed analysis on typical AI for wargames, or just some general but little-known facts or details about game design and implementation.

Jim Brady
Bowie, MD

CGW is the only publication that gives sufficient coverage to computer wargames. Your reviews are excellent and written by people who know not only computer wargames, but boardgames and miniatures wargaming as well. Bravo! Keep up the good work.

Unsigned R.I.D. card
Pittsburgh, PA

We think you'll love our new section, "Computer Wargaming World," which premieres in this issue.

CD-ROM

As usual, your magazine was superb. Good articles, good ads, loads of exciting things to spend my bucks on but, to be honest, the editorializing went a little bit (byte) too far. You guys go to the Spring Comdex and the CES show and then write these articles that tell us that "state of the industry."

The future is bright. There is new hardware on the frontier. The excitement builds. The fanfares sound. Come on, Russ! Come on, Johnny! These shows are pure hype for the sole purpose of enticing other retailers and "marketeers" (cousins of the mouseketeers) to buy their latest add-on to the PC-world.

Case in point: You guys have been talking about the glories of CD-ROMs for several issues. While I have seen listings in mail order houses for CD games, I have yet to see one of these things on a shelf, let alone walk into fellow gamer's house and hear him praise the wonders of the CD-ROM. Why all the hype? CD-ROM has already gone the way of OS-2. No one really wants the thing, and yet we keep hearing how wonderful it will be when we get it. Frankly, I don't believe it.

The new games that I am seeing now do more than I could ever imagine. Why would I spend $500 on a CD-ROM player when a) there is no industry standard; b) nobody has produced any games that I wish to play or which I can't play on my PC (most of the games available are either shareware or old games that I played years ago) and c) I can't afford that new box.

CD-ROM games may be the "mega game" of the future, but I know few people who are willing to put that much time and effort into one game. Really now. Imagine playing an *Ultima* game for a solid year (and I like the *Ultima* series). Maybe that much of a world could be packed onto a couple of CDs, but what kind of person is going to isolate themselves and spend that kind of time on one game? You expect too much from the attention span of gamers. I don't want length. I don't want more graphics. And I don't want to hear digitized footsteps, door creaks or even belches. I want newer and better plots. Give me stories that expand my horizon. Make me think. Don't substitute hardware for the challenge of my creativity.

Publishers should be investing in bright talent that will tell new stories (or at least tell the old ones with new curves) and dazzle my grey cells. Leave the CD-ROMs for the marketeer and let's play a game.

David C. Hicks

If gamers, Mr. Hicks aside, want better graphics and sound than the present state of the art, it will require more storage. If gamers want a broader market so they can be sure the computer game market will not disappear as swiftly as the market for individual platforms (Apple II, Atari 8-bit, C-64/128, Atari ST, Apple IIGS, etc.), there will have to be a successful platform that can support these entertainment masterpieces. We are not trying to sell hardware for anyone. We just recognize the hurdles the industry is going to have to overcome in order to move beyond the present. **CGW**

Circle Reader Service #79

Introducing...

COMPUTER WARGAMING WORLD





Art by Rodger MacGowen; © RBM Graphics

War's a Beach

A Preview of Three-Sixty's Utah Beach

By Bob Proctor



In 1979, when personal computers were new, this reviewer wrote an article proclaiming that computer wargames would become as popular as the more traditional paper and cardboard variety. That may or may not be true. What *is* true is that computer wargames are on the march again. So it is with great excitement that the present writer can say that *Utah Beach* from **Three-Sixty Pacific** is a landmark in computer wargaming! Any wargamer who finds him-self/herself disappointed by what's been seen on computers to date should take a look at this one.

Utah Beach is visually stunning, with colorful, high-resolution maps and displays. It is like a board game on the screen in its lavish use of color maps. The mouse-driven interface is intuitive and simple: just pick a unit and point where it should go. The game sets new heights of realism. At least, it feels right so far. The complex, interconnected systems for weather, supply, morale, movement, combat and fatigue don't slow down play because the computer handles the bookkeeping, but one had better believe that it is all there.

Of course, there is a catch, at least for most wargamers. If one wants to play *Utah Beach* this year, he'll have to have a Mac. (Do I hear cheering?) It is still too early in development to say exactly how big a Mac one will need, but the goal is to make it possible to run *Utah Beach* on a 2MB system with System 6.0.7. Those who want to run the game under System 7.0 will have to have more memory. IBM owners will simply have to wait for Spring, 1992!

Hit the Beach...

Utah Beach was the western-most of the five beaches used on D-Day and one of two assaulted by U.S. forces in particular. The campaign game begins on the day *after* the invasion and runs for about a month. The basic Allied goal is to capture the Normandy peninsula and clear it of German units. At four hours per turn, this makes for a long game. For those with less time to invest, the five scenarios are shorter and some can be completed in less than an hour. They depict critical moments during this campaign: the breakout from the beachhead, the link-up with Omaha Beach, the drive on Cherbourg and the battle for that fortress city. For more variety, there are seven "what-if" variants that can be used in any combination and the player can also control the amount of bad weather (three levels) and air superiority (five levels).

Most of the units represent battalions and all have ratings for movement, attack, defense, armor (attack), anti-tank (defense) and morale. The level of fatigue, disruption and supply will modify these ratings. Artillery units are also rated for indirect fire and maximum range. This attention to detail enables the game to require that the player function via a realistic command structure for each side and hence, handle HQ units properly.



But Is It Art?

There are several features that would give *Utah Beach* consideration as the best computer wargame yet. The first one that strikes the player—as soon as the game begins—is the graphics. The subtle shading of greens and browns on the eight terrain types is something one only expects from a board game map. German units are, appropriately enough, gray and U.S. units are olive drab. Special units stand out in contrasting colors, such as khaki for U.S. airborne and black (of course!) for the SS. Unit identifications are easy to read and players have a choice of standard military symbols or small icons to show unit types. Each type of terrain also has a distinctive "fill pattern" for color-blind users and monochrome systems. If a player should desire, each hex may be shown in two shades of its basic color, the lighter shade showing hexes currently under player control. If the player elects to switch sides, the colors switch too. "Friendly" hexes are always lighter.

The second reason *Utah Beach* may be the best yet is its user interface. Playing a game well has never been easier, because the information one needs to make effective decisions is available *during* movement. During the Planning Phase, a simple click on a hex will illuminate the supply line in bright green flashes. All units in the hex are displayed in a window and clicking on one of them will not only reveal its current status, but also display a row of "buttons" to be pressed for "point and click" orders. If one clicks on a "Move" or "Attack" button, it is then possible to go to the map, click on each desired hex for that unit to move through and observe the number of movement factors being updated as the unit moves. The program even provides estimates of attack and defense strengths in combat situations. Why estimates? Because all units move simultaneously during the Execution Phase and, by the time the attack is launched, conditions may be different than they appeared during planning!

Another area where *Utah Beach* excels is in the presentation of the results for each turn. This is the "After Action Phase." All combat locations are marked with a brightly colored flag to show who won. Clicking on one of these locations elicits a summary of the battle displayed at the bottom of the screen. Though the initial summary is in general terms, one must only click on the "Detail" button to see exactly what the odds were and what modifiers were used.

Utah Beach has a very functional overview mode. It does not attempt to show the entire campaign area but displays about four times more area than the "Close View." This turns out to be enough to see the entire area for several of the scenarios. The game can be played equally well in either view mode. There are "buttons" to scroll in any of eight directions and for really fast travel, there is a very small map of the entire peninsula and clicking anywhere on this map will center the main view on that location.

The automated features make the game a joy to play and can be thought of as a staff of "intelligent assistants." Best of all is the "Move Idle Units" command. It tells the computer to generate orders for any unit that doesn't already have them. So, one can command in the critical areas and let the computer do the rest! For example, there is no need to spend time bringing new forces up to the front, since automatic strategic movement and divisional movement are also useful.

Another assistant allocates the basic supply tonnage every turn. One need only deal with the excess, allocating it to those units that will need the extra combat strength. In addition, one may like to assign targets for fighter bombers and artillery, but those who do not can simply "enlist" assistants to do those chores too. Artillery support is automated by division, so one division can fire defensively while another is assigned individual missions, unit by unit!

Grognard Bait

Here are a few more appetizers to entice wargame veterans:

Limited Intelligence can be turned off completely if one prefers the traditional boardgame style of knowing everything. When turned on, the information about the enemy varies in content, depending on proximity, and improves with time. There is also a "Fog of War" option (not yet implemented on the current beta) that is supposed to distort the accuracy of this data. Even the weather forecasts for the Allies are more accurate than for the Germans, who had no weather stations in the Atlantic.

Zones of Control are of variable strength! They are affected by unit type, terrain, morale, fatigue, weather and night time. One can move through ZOCs, but they impose a penalty on movement proportional to their strength. The calculations are explained in the manual but the computer handles them all discreetly. One is left with the uncertainty of not knowing exactly how far a unit can move, or when an attack will happen relative to other movement.

Stacking limits (3 battalions per hex) apply all the time. With simultaneous movement, overstacking can occur if too many units try to go through the same hex. Thus, congestion at a road junction can mean delays and more uncertainty. Sound like a modern work-day commute?

The Future

There are a few things that would make *Utah Beach* even more complete. A fuller explanation of the combat algorithms would be nice; maybe the final manual will include one. An ability to change ratings of individual units would please any nit-pickers—for now gamers must live with the designers' choices.

The only *important* option missing is head-to-head play between two systems linked via serial cable, modem or network. This would make it easier to get that social element back into the game. **Three-Sixty** plans to upgrade *Utah Beach* next spring (concurrent with the release of the DOS version) and add this feature at that time. This writer salutes the authors (Larry Merkel, Ed Rains and Keith Zabalaoul) for developing a wargamer's wargame. Here's hoping it does as well on the marketing front as it has on the development front. Great job! **cgw**

Computer Strategy and Wargames: The 1900-1950 Epoch

Part I (A-L) of an Annotated Paiktography

by M. Evan Brooks

This reviewer has written two prior round-ups of what is available in the marketplace for the computer wargamer ("World War II" in *CGW* #37 and "Pre-20th Century" in *CGW* #75). However, the computer market changes quickly and what was state-of-the-art in 1985 may not even be marginally acceptable in today's world. In fact, the "Hall of Fame" illustrates games that were breakthroughs and commercial successes; yet many of them do not "age" well, and it is doubtful if the computer world will ever develop its classics like *Monopoly* is to the boardgame genre.

Thus, the paiktographies will be updated and revised on a regular basis, so that the user may have some indication of both what is and was available. It should be noted that the ratings are an individual preference and do not necessarily reflect the opinions of the publisher or editor of this magazine. Also, please note the platform availability, since a five-star game on an Atari 800 that is several years old is not of the same sophistication as a new product designed for an IBM 486-33. However, it has been given its rating for what it originally did and, to a lesser extent, what it still does. It may even be slightly higher-rated for the place it holds in this reviewer's heart and memory.

Of course, the designers look askance at these ratings and often deluge the magazine with voluminous complaints. Nevertheless, the discriminating reader will realize that these ratings are intrinsically subjective and should be tempered in terms of this writer's normal reviews in order to ascertain the inherent biases. What is also noteworthy is that few computer games have a shelf life longer than three years, yet boardgames remain classics up to ten years or more after their release (e.g. *Napoleon's Last Battles*, *A House Divided*, *Up Front*).

In a ten-year span (1981-1991), the gaming market has gone from a 16K 8-bit computer to a 1-2 MB 16/32-bit computer with clock speeds now in excess of 20 MHz. The eight-bit market is moribund (if not outright deceased), and the MS-DOS clones hold a commanding lead in forthcoming titles. The ST has been virtually abandoned in the United States and, while the Amiga's superior game and graphics capabilities still hold a loyal following, the MS-DOS machines are "where the action is".

Legend: xxx = Data not available.
Line 1: *Title*



Action in the North Atlantic

Line 2: (Machine Format [**A**tari / **Com**modore / **Ap**ple II / **T**RS-80 / Apple II**GS** / **Am**iga / Atari **ST** / **M**acintosh / **I**BM]) Issue of CGW in which that game was mentioned (**bold print** refers to major article); Company; Designer; Date of Publication; Price (O/P: Out of Print); Rating:

0	= Good use as a magnet holder
*	= Avoid
**	= Marginal
***	= Average to Good
****	= Very Good
*****	= Highly Recommended
+	= "and a half"
N-R	= Not Rated)

Line 3: Difficulty (**Beg**inner, **Int**ermediate, **Adv**anced) / Environment (**Land**, **Nav**al, **Air**, **Dipl**omatic) / Level (**Ta**ctical, **Op**erational, **Str**ategic)

Number of Players (M: modem option)

Tactical: man-to-man up to company level. Turns represent seconds to hours.
Operational: battalion-level to division-level. Turns represent hours to weeks.
Strategic: corps-level to theater army or higher. Turns represent weeks to years.

Unit Size	# of Men
Fire Team	2- 3
Squad	9- 12
Platoon	40- 50
Company	120- 150
Battalion	500- 1,000
Brigade	3,000- 5,000
Division	10,000- 15,000
Corps	20,000- 80,000
Army	100,000- up



Battle of Britain

Ace of Aces
(A/C/I; #32;38) **Accolade**; Michael Bates and Rich Banks; 1986; $29.95; *+
Beg/Air/Tac
1

An arcade-type flight simulator offering a somewhat ahistorical rendition of fighter combat during World War II.

Ace–Air Combat Emulator
(C) **Spinnaker**; Ian Martin; 1986; ?; N-R
Beg/Air/Tac
1-2

A head-to-head flight simulator.

Aces of the Pacific
(I) **Dynamix**; Damon Slye; 1992?; ?; N-R
Adv/Air/Tac-Op
1

A World War II flight simulator, reminiscent of *Battlehawks* (cf. infra), but in **Dynamix**'s own style. Until *Chuck Yeager's Air Combat* (cf. infra), **Lucasfilm** had claimed World War II aerial operations as its private domain. The situation is obviously changing quickly....

Action in the North Atlantic
(Ap/I; #**70**,74) **General Quarters**; Owen P. Hall, Jr.; 1989; $35.00; N-R
Beg/Nav/Tac-Op
0-2; M

WWII and the Murmansk run. Sink the *Scharnhorst*!

Action Off the River Platte
(AP/I) **General Quarters**; Owen P. Hall, Jr.;

xxx; $35.00; N-R
Beg/Nav/Tac-Op
0-2; M

Pursuit and destruction of the German "pocket battleship" *Graf Spee.*

Action Stations
(I; #**68**) **RAW**; CDR Alan Zimm; 1989; $49.95; ***+
Adv/Nav/Tac-Op
1-2

A very comprehensive simulation of surface warfare during World War II (actually 1922-45). Excellent research and complexities are marred by poor graphics and an awkward user interface. Still, it is the most detailed simulation covering this period.

After Pearl
(A; #4.6,37) **SuperWare**; George Schwenk; 1984; O/P; ***
Beg/Nav/Op-Str
1-2

A strategic simulation of the War in the Pacific (1941-1945), this game bears little resemblance to history. Reminiscent of **Avalon Hill**'s boardgame *Victory in the Pacific*, it is quick and fun to play. A "cotton candy" game, it may well rot your mind, but this reviewer still likes it.

Afrika Korps
(Am/ST; #87) **Impressions**; Ken Wright; 1991; N-R
Int/Land/Op
1

Air Raid Pearl Harbor
(AP/I) **General Quarters**; Owen P. Hall, Jr.; xxx; $35.00; N-R
Beg/Nav/Tac-Op
0-2; M

Variations on an unplayable theme? Based upon the title and description, this simulation of the Japanese assault on Pearl Harbor in 1941 must be for either sadists or masochists (depending on which side is played).

Air Warrior
(#63;**67**) **GEnie**; Kesmai; 1988; $6.00/hour; ***+)
Int/Air/Tac
1-multi; M

An on-line simulation of tactical air combat from World War I onwards. Continually being revised and updated, it is interesting, although it can become an expensive way of life. The learning curve is lengthy, but often veteran pilots are available on-line who are willing to give assistance and tutorials.

Ancient Art of War in the Skies
(I) **Broderbund**; Dave and Barry Murry; 1992; ?; N-R
Int/Air/Tac-Op
1

A forthcoming action game involving aerial operations of World War I.

Arnhem—The Market-Garden Operation
(Am/I; #86) **CSS**; R. T. Smith; 1991; ?; N-R
Int/Land/Op
1-3

At the Gates of Moscow



Chuck Yeager's Air Combat

(A/C/Ap; #**25**) **SGP**; David Heath; 1985; O/P; N-R
Int/Land/Op
0-multi

A computer game released simultaneously with the boardgame version, it covers the 1941 Axis drive on Moscow. Neither product has withstood the test of time.

B-24 Combat Simulator
(C/Ap/I/; #**39**) **Strategic Simulations, Inc.**; John Gray; 1987; O/P; **+
Int/Air/Tac
1

A simulation of the World War II Ploesti oil raids, the player must join his B-24 to the formation, fly to the target and inflict maximum damage. While accurate, the game suffers somewhat from a repetitious nature and the fact that a single bomber in a raid offers little room for initiative. Superseded by *Secret Weapons of the Luftwaffe* (cf. infra).

Banzai
(Ap/I; #85) **General Quarters**; Owen P. Hall, Jr.; 1991; $35.00; N-R
Beg/Nav/Tac
0-2: M

The last voyage of the Japanese super-battleship *Yamato* in a tactical battle simulation of World War II Pacific action.

Battle Command
(#40;74) **Applied Computer Consultants**; Bob Sinclair; 1986; O/P; N-R
Int/Land/Tac
2; M

Battle Cruiser
(A/C/Ap; #37,**38**) **Strategic Simulations, Inc.**; Gary Grigsby; 1987; O/P; **
Adv/Nav/Tac
1-2

The sequel to *Warship* (cf. infra), this simulation covers World War II in the Atlantic and World War I. Similar to its predecessor, it suffers the same strengths and weaknesses.

Battle for Midway
(C) **Firebird**; xxx; 1986; O/P; N-R
Int/Nav-Air/Tac-Op
1

Battlefront
(C/Ap; #**32**,37) **Strategic Studies Group**; Roger Keating and Ian Trout; 1987; $39.95; ***
Int/Land/Op
0-2

A very flexible game covering corps-level combat and proper use of the chain of command during World War II. Design-your-own scenarios open the bulk of the 20th century to gaming; however, the artificial intelligence of subordinate commanders is notoriously weak. The game system will either attract or repel the player—there is no middle ground.

Battleground
(#40) **MVP Software**; xxx; 1987; xxx; N-R
Int/Land/Tac
2

Tactical squad-level operations on the Western Front during WWII.

Battle Group
(C/Ap;I;#27,**29**) **Strategic Simulations, Inc.**; Gary Grigsby; 1986; O/P; **+
Adv/Land/Tac
1-2

SSI's World War II Western Front sequel to *Kampfgruppe* (cf. infra), this simulation offers tactical scenarios and the ability to design your own. Not as successful as its antecedent, it suffers from some, but not all, of the same problems.

Battle Hawks 1942
(I; #**53**,63,64) **Lucasfilm**; Noah Falstein and Lawrence Holland; 1988; $29.95; ****
Int/Air/Tac
1

A combat simulator of the major carrier battles of World War II from the cockpit perspective. Good graphics, excellent documentation and quick play keep this product a real player. Lucasfilm is considering a newer version, which would bring it up to the state of the art for the faster machines currently available.

Battle of Britain
(C) **Firebird**; xxx; 1986; O/P; N-R
Int/Air/Op
1

Battles of the Atlantic
(Ap/ST/I; #5.2,**29**) **Simulations Canada**; L. Howie; 1986; $60.00; N-R
Adv/Nav/Op
1-2

A World War II simulation. An amalgamation of a board and computer game, it uses map, counters and computer.

Battle of the Bulge
(I) **Ark Royal**; Carl Carpenter; 1988; xxx; N-R
Int/Land/Op
1-2

Battleship Bismarck
(Ap/I; #**74**) **General Quarters**; Owen P. Hall, Jr.; 1991; $35.00; N-R
Beg/Nav/Tac-Op
0-2; M

World War II pursuit of the German battleship by British Naval Forces.

Battleship
(C/ST/A/I) **Epyx**; xxx; 1988; xxx; N-R
Beg/Nav/?
1-2

The old Milton Bradley *Battleship* game with a couple of new ideas and twists.

Battle Stations
(M) **TimeLine, Ltd.**; M. L. Samford and W. P. Worzel; 1986; O/P; N-R
Beg/Nav/?
1-2

Again, the old Milton Bradley *Battleship* game with no new ideas and twists found in either the computer or boardgame versions.

Battle Stations
(Ap/I) **General Quarters**; Owen P. Hall, Jr.; xxx; $35.00; N-R
Beg/Nav/Tac-Op
0-2; M

A simulation of the WWII USS *Houston*, historically a lopsided contest with a few Americans and Allied forces attempting to stem the Imperial Japanese fleet at its zenith.

Battle Tank: Barbarossa to Stalingrad
(Am/ST/I; #72) **Simulations Canada**; Stephen Newberg and Stephen St. John; 1990; $60.00; N-R
Adv/Land/Op

Tactical armored combat in the East, June 1941-May 1943.

Battle Tank: Kursk to Berlin
(Am/ST/I) **Simulations Canada**; Stephen Newberg and Stephen St. John; 1991; $60.00; N-R
Adv/Land/Op
1-2

Tactical armored combat in the East, June 1943-May 1945.

Beach-Head
(C) **Access**; Roger and Bruce Carver; 1983; O/P; N-R
Int/Land-Air/Tac
1

Arcade game of WWII amphibious landing operations.

Beach-Head II: The Dictator Strikes Back!
(C) **Access**; Roger and Bruce Carver; 1985; O/P; N-R
Int/Land-Air/Tac
1-2

Sequel to *Beach-Head* allowing for head-to-head play.

Berlin 1948
(I; #69) **Electronic Zoo**; xxx; 1990; $49.95; ***
Int/Land/Tac
1

More of a role-playing adventure, set in Cold War Berlin, the player must interact with the environment in order to recover a missing nuclear weapon. (Perhaps an earlier *Sum of All Fears*?)

Bismarck: The North Sea Chase
(C/Ap; #42) **DataSoft**; Anthony Stoddart; 1987; O/P; *+
Beg/Nav/Tac-Op
1

An arcade-type simulation of the chase for the *Bismarck*, this product offers little innovation, insight or play value.



Command HQ

Blitzkrieg at the Ardennes
(Am/I;**#67**) **RAW**; Al and Joseph Benincasa; 1989; $49.95; N-R
Adv/Land/Op
1-2

A boardgame analog of "The Battle of the Bulge" during World War II, in which the computer handles bookkeeping and the computer opponent offers predictable opposition.

Blue Max
(A) **Synapse**; xxx; 1983; O/P; 0
Beg/Air/Tac
1

An arcade game in every sense of the world (and marketed as such). However, because it was one of the first simulations to have a World War I environment, it is included herein.

Blue Max
(I; #76,77,**78,83**) **Three Sixty Pacific**; Rick Banks and Paul Butler; 1990; $49.95; **
Int/Air/Tac
1-2

First out of the blocks in the 1990-91 World War I air simulator competition, and it shows. More a game than a representation of reality, it does not really succeed on either level. An upgrade is available in order to get past the original release's inaccurate flight model.

Bomb Alley
(Ap; #3.4) **Strategic Simulations, Inc.**; Gary Grigsby; 1982; O/P; N-R
Adv/Air-Nav/Op-Str
1-2

Gary Grigsby's sequel to *Guadalcanal Campaign* (cf. infra), this treatment of the World War II Mediterranean Campaign was not a success in its initial release. Time has not revised this judgment.

Breakthrough in the Ardennes
(A/C/Ap/I; #**5.1**,33,37) **Strategic Simulations, Inc.**; David Landrey and Chuck Kroegel; 1983; O/P; **
Adv/Land/Op
1-2

A follow-on to *Operation Market-Garden* (cf. infra), this game suffers the same strengths and weaknesses. Better than *Tigers in the Snow* (cf. infra), it is more complex and still obsolescent.

Bulge—The Battle for Antwerp
(C) **Green Valley Publishing**; xxx; 1985; O/P; N-R
Beg/Land/Op
1-2

Real-time "Battle of the Bulge" game which boasts "no manual required." Player intelligence also appears to be dubiously optional.

Carrier Force
(A/C/Ap; #4.2,4.6,**27,29**,37) **Strategic Simulations Inc.**; Gary Grigsby; 1983; O/P; **
Adv/Nav/Op
1-2

A tactical/operational simulation of the major Pacific carrier battles of World War II, it is marred by extremely slow execution and historical inaccuracy in some areas. Obviously dated, it will be superseded by designer Gary Grigsby's new treatment of the same subject.

Carrier Force II
(I) *Strategic Simulations, Inc.*; Gary Grigsby; 1992; ?; N-R
Adv/Nav/Op
1-2

This update of *Carrier Force* still does not have a formal title, but when released, it will update its ancestor to current standards in computer gaming. It will have a campaign option (up to two years).

Carriers at War
(C/Ap/I; #5.1,**5.2**,37) **Strategic Studies Group**; Roger Keating and Ian Trout; 1984/1991; $50.00/?; **** - ?
Int/Nav/Op
1

Similar to coverage to *Carrier Force*, it excels in its flexibility, options and limited intelligence. It is broader in scope than *Carrier Force*, and the forthcoming MS-DOS version should bring the product up to state of the art. Highly recommended.

Castle Wolfenstein
(A/C) **Muse**; Silas Warner; 1983; O/P; *+
and
Beyond Castle Wolfenstein
(A/C; #5.2) Muse; Silas Warner; 1984; O/P; **

Arcade "classics," these products take the dungeon mentality and transfer it to World War II. *Castle Wolfenstein* postulates an escape from a Nazi castle, while *Beyond Castle Wolfenstein* offers infiltration of a Nazi fortress to assassinate Adolf Hitler. As serious as *Pac-Man*, its graphics are dated, but it remains in this reviewer's fond memories.

Chuck Yeager's Air Combat
(I; #85,86) **Electronic Arts**; Brent Iverson; 1991; $59.95; ****+
Adv/Air/Tac
1

A combat flight simulator offering the ability to fly scenarios in World War II, Korea or Vietnam, or mix and match them. Good graphics, good game play and an excellent post-mission analysis yield a high recommendation.

Clash of Wills
*(A/C; #5.4,***29***,37)* **DKG**; Marc Summerlott; 1985; O/P; *+

THE ART OF WARFARE



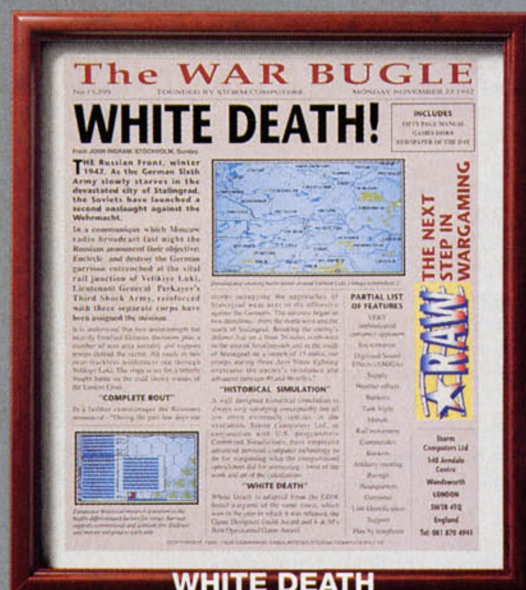
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Int/Land/Str
1-3

A strategic simulation of the war in Europe (1939-1945), covering both Eastern and Western Fronts. Primitive graphics and poor user interface coupled with extremely poor documentation will deter most players. Yet its sheer scope does offer some playability and enjoyment. But for a more current treatment, cf. *Storm Across Europe*.

Close Assault
(A/Ap; #3.3) **Avalon Hill**; Gary Bedrosian; 1983; $35.00; *
Beg/Land/Tac
1-2

World War II tactical infantry simulation, with the computer utilized as a boardgame assist. Utilizing a hex-grid map and counters, it is has touches of the boardgames *Squad Leader* and *Panzerblitz*. However, it is awkward, clumsy and obsolete.

Combat Leader
(A/C; #37) **Strategic Simulations, Inc.**; David Hille; 1984; O/P; **
Beg/Land/Tac
1

A tactical simulation of armored warfare (squad/platoon) with built-in as well as design-your-own scenarios; the game offers a myriad of options. Quick playing, but with primitive graphics (destroyed armored vehicles resemble nothing so much as cockroaches).

Command HQ
(I; #74,76,**77,79,80**) **MicroProse**; Dan Bunten; 1990; $59.95; ****+
Int/Land-Nav-Air/Str
1-2; M

A product capable of recreating World Wars I-IV(?), this is a modified "beer and pretzels" game. Highly recommended for entertainment, although not as a historical learning experience.

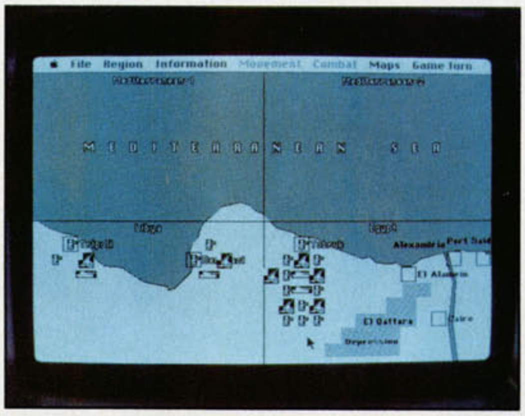
Computer Air Combat
(Ap) **Strategic Simulations, Inc.**; Charles Merrow and Jack Avery; 1980; O/P; N-R
Adv/Air/Tac
1

A computer-clone of Yaquinto's boardgames *Air Force* and *Dauntless*, this covers tactical air combat during World War II. One of the first air combat simulations, this sparked the birth of *Computer Gaming World* as a forum for serious reviews.

Computer Ambush
(A/C/Ap/M/ST/I; #3.3,**37**) **Strategic Simulations, Inc.**; Ed Williger and Larry Strawser; 1980; O/P; **+
Adv/Land/Tac
1-2

A tactical man-to-man simulation of patrolling in World War II. The graphics are extremely primitive, but the details make up for this deficiency to a large extent.

Computer Bismarck
(A) **Strategic Simulations, Inc.**; Joel Billings; 1980; O/P; N-R
Int/Nav/Tac
1



The Desert War

The game that started SSI, its age and functional obsolescence make this product useful only to the collector. More of a computer assist to a boardgame than a true computer game.

Crusade in Europe
(C/Ap/I; #5.3,**5.5**,26,37) **MicroProse**; Sid Meier and Ed Bever; 1985; O/P; ****+
Int/Land/Op-Str
1-2

An operational/strategic simulation of the Western Front during World War II, the scenarios offer real value. The campaign suffers from an incompetent computer opponent, but this product has aged well. Now, if they would only offer the hard drive-installable version....

Dam Busters
(C/Ap/I; #26,37) **Accolade**; Rick Banks and Michael Bate; 1985; $14.95; *+
Beg/Air/Tac
1

An arcade recreation of the bombing of the Ruhr Dams a la *633 Squadron*. Definitely dated; too much of a game and not enough of a simulation.

Das Boot
(I; #74,76,**82**) **Three Sixty Pacific**; Paul Butler and Rick Banks; 1991; $49.95; **+
Int/Nav/Tac
1

A World War II submarine "simulation," it is not as sophisticated as *Silent Service II* (cf. infra), but it does allow one to play the German side.

Dawn Patrol
(Ap) **TSR**; xxx; 1983; O/P; N-R
Beg/Air/Tac
1

An arcade simulation of World War I aerial operations, featuring the wire-framed graphics of the era and none of the role-playing capacity of the pen-and-paper game.

Dawn Patrol
(C) **Mark of the Falcon**; Scott C. Baggs; 1985; O/P; N-R
Int/Nav/Tac
1

Real-time WWII submarine simulation.

Decision in the Desert
(C/Ap/I; #**5.5**,37) **MicroProse**; Sid Meier and Ed Bever; 1985; O/P; ****+
Int/Land/Op
1-2

An operational study of the Desert Campaign in World War II, it offers a fascinating study that will teach appropriate lessons in armored desert warfare. More accurate than *Crusade in Europe* (cf. infra), but narrower in scope. Even with age, this game is still enjoyable.

Desert Fox
(C; #36) **Accolade**; Rick Banks and Michael Bate; 1985/1987; $19.95; *
Beg/Land/Op
1

An operational simulation of the African Campaign, it attempted to mix both arcade play and simulation, and ultimately failed on both levels.

Desert Rats
(I; #54,**58**) **CCS**; R.T. Smith; 1989; $39.95; **
Int/Land/Op
1-2

Similar in coverage to *Decision in the Desert*, it offers a scenario of the entire campaign (in 672 turns!). Awkward user mechanics and primitive graphics mar this product; age has turned it to vinegar, and it's not even that old.

Desert War
(M; #60) **SJP**; xxx; 1989; xxx; N-R
?/Land/Tac-Op
2

Features WWII desert action and uses the computer to handle the bookkeeping. No computer opponent is available, however.

Destroyer
(C/Ap/I/GS; #33) **Epyx**; xxx; 1986; O/P; **+
Int/Nav/Tac
1

Graphic emphasis yields an interesting portrayal of World War II destroyer operations. However, the documentation and scenarios are underdeveloped. Again, age has rendered it obsolescent.

Destroyer Escort
(C; #62) **Medalist**; Robert Prescott; 1989; O/P; **+
Beg/Nav/Tac
1

Very similar to *Destroyer* (cf. infra), but a newer version.

Diplomacy, Computer
(I; #37,41,75) **Avalon Hill**; Ron Sutherland; 1984/1992(?); $50.00; ***/?
Int/Dip/Str
1-6

A faithful rendition of the classic boardgame, its graphics and computer intelligence are not state-of-the-art. Hopefully, the new edition will return this product to the consumer's forefront.

Dive Bomber
(I; #55) **US Gold**; xxx; 1989; $39.95; 0+
Beg/Air/Tac
1

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IBM EGA DISPLAY

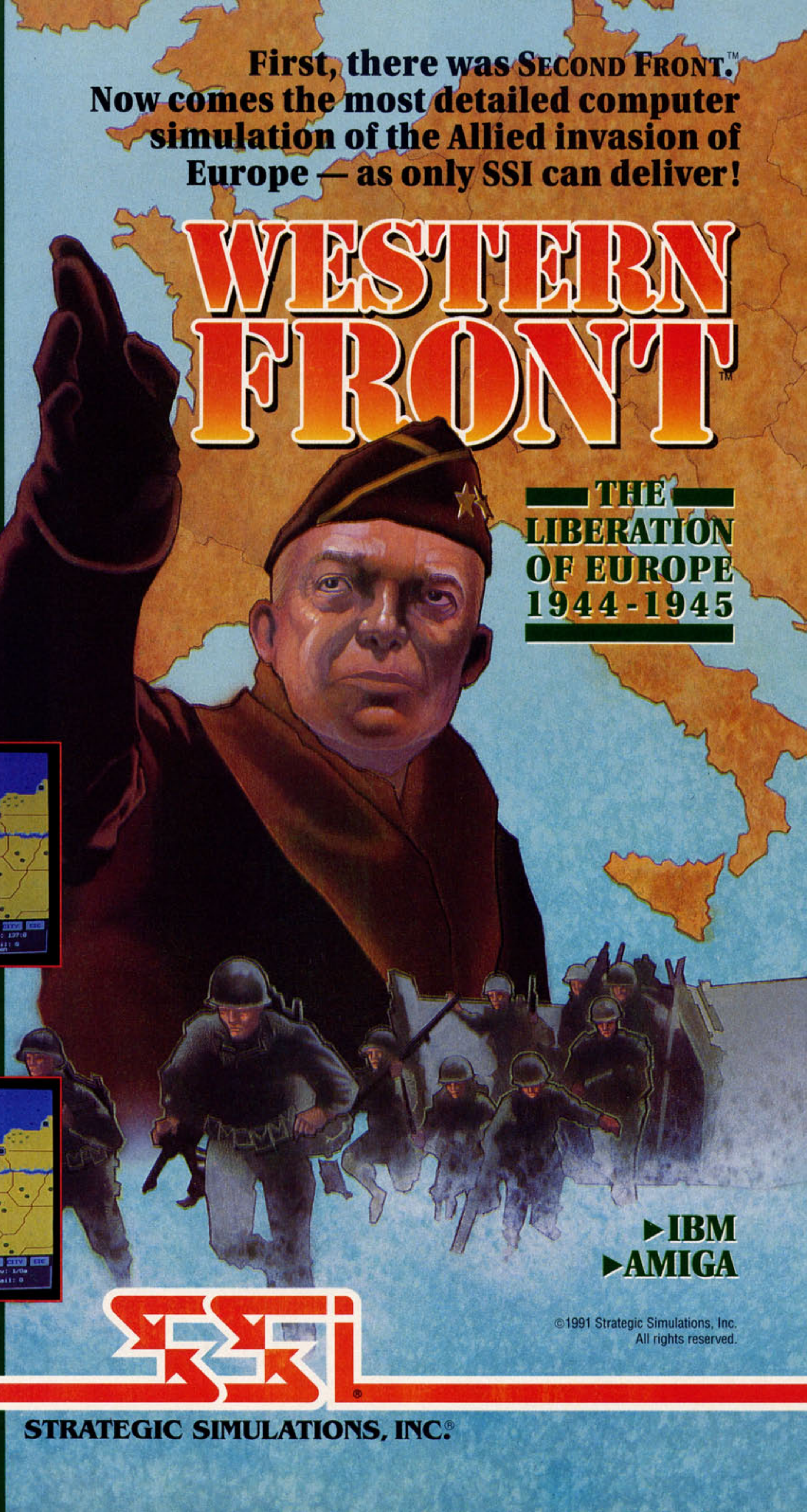


Allied player reviews units that make up the 1ST British Corps. More pop-up menus are available to show even greater detail.

IBM EGA DISPLAY



Allied armies are poised to break out from Normandy.



A "Sink the *Bismarck*" simulation, marred by mediocre graphics, documentation and an overall lack of panache. Similar to *Bismarck: The North Sea Chase* (cf.infra).

Dnieper River Line
(A/Ap) **Avalon Hill**; Bruce Ketchledge; 1983; O/P; N-R
Int/Air/Op
1

An Eastern Front battle during World War II, this is not so much a computer game as it is a computer assist to a boardgame (it comes with map and counters). It ultimately succeeded on neither level.

Dreadnoughts
(C/Ap/I; #4.5,4.6,**26**) **Avalon Hill**; Thomas Dowell; 1984; $30.00; *+
Int/Nav/Tac
1-2

World War II naval action covering the pursuit of the German battleship *Bismarck* in 1941. Operational and tactical levels, with the latter allowing one to modify and create his own scenarios. However, poor graphics and game play do little to enhance the game.

Eagles
(A/C/Ap) **Strategic Simulations, Inc.**; Robert Raymond; 1983; O/P; ***
Beg/Air/Tac
1

World War I aerial operations, more akin to chess than a flight simulator. However, it can be an enjoyable, albeit unrealistic, experience.

Eagles Nest, Into the
(Ap/C/Am/I; #**43**) **MindScape**; xxx; 1987; $29.95; **+
Beg/Land/Tac
1

A newer clone of *Castle Wolfenstein* (cf. infra), this arcade product is fun for a short time, but rapidly loses its interest appeal.

Eastern Front
(A; #37) **APX**; Chris Crawford; 1982; O/P; *****
Int/Land/Op-Str
1

An operational-strategic simulation of the German invasion of Russia during World War II, this game was the first to show what the computer could do in wargaming. Obsolete by contemporary programming standards, it remains fun to play. The cartridge version offers both beginner and advanced scenarios.

Empire
(I/ST; #40,41,**43**,**54**,60,63,**75**) **Interstel**; Walter Bright and Mark Baldwin; 1987; $49.95; ****+
Int/Land-Sea-Air/Op
1-3

A very enhanced version of the public domain product, this offers an intriguing simulation of global-type warfare. Emphasizing aspects of land, sea and air, the simulation is very interesting, although it does take a long time to win. Design-your-own options and easy user interface make this a player. Based upon the combat units, this appears to be a World War I general's concept of how the next war



Iwo Jima

would be fought (battleships remain king!). Designer Mark Baldwin's new *The Perfect General* (cf. infra) may well supersede his former fine effort.

Europe Ablaze
(C/Ap; #**27**,37) **Strategic Studies Group**; Roger Keating, Eric Baker and Ian Trout; 1985; $49.95; ***
Int/Air/Op
1

A simulation re-creating the Battle of Britain and the bomber offensive over Germany during World War II. Design-your-own scenarios and much detail, but *Secret Weapons of the Luftwaffe* (cf. infra) has superseded this game to a large degree, although that product is more tactically oriented.

Fall Gelb
(C/I/Ap/ST) **Simulations Canada**; Les Howie; 1988; $60.00; N-R
Int/Land/Op
1-2

The fall of France, Spring 1940.

Field of Fire
(C/A/Ap/ST/I; #**37**) **Strategic Simulations, Inc.**; Roger Damon; 1984; O/P; **
Int/Land/Tac
1

A tactical approach to squad-level operations on the Western Front during World War II. History and "lessons learned" take a back seat to playability, but it is an interesting introduction to computer wargaming.

Fifty Mission Crush
(C/I/A/Ap; #4.4,**35**,37) **Strategic Simulations, Inc.**; John Gray; 1984; O/P; **
Beg/Air/Op-Str
1

A tactical re-creation of the bomber offensive against Germany during World War II. Realistic, but dull; superseded by *Secret Weapons of the Luftwaffe* (cf. infra) in terms of graphics, game play, and historical detail.

Fighter Command
(Ap; #3.4,4.4,**5.1**,**5.2**,**26**) **Strategic Simulations, Inc.**; Charlie Merrow and Jack Avery; 1983; O/P; N-R
Adv/Air/Op-Str
1-2

A classic SSI game which features a command-eye view of the "Battle of Britain" rather than the "in the air" action depicted in later releases.

Fire Brigade
(I/M; #**49**,63,64,66) **Panther**; Dave O'Connor, Tony Oliver and Ben Freasier; 1989; $39.95; ***+
Adv/Land/Op
1

A simulation of the 1943 battles around Kiev on the Eastern Front. Good documentation and excellent packaging have yielded a game that has withstood the test of time, although the learning curve is somewhat long.

Firepower
(Am) **MicroIllusions**; xxx; 1987; $24.95; N-R
Beg/Land/Tac
1-2; M

An arcade tank simulation with direct-connect capability.

First Over Germany
(C; #58,**59**) **Strategic Simulations, Inc.**; John Gray; 1989; O/P; **+
Int/Air/Tac
1

A tactical simulation of the bomber offensive against Germany during World War II, it is relatively detailed. However, game play becomes somewhat tedious. *Secret Weapons of the Luftwaffe* (cf. infra) covers a similar subject but in a more state-of-the-art fashion.

Flak
(A,C,Ap; #4.3) **Funsoft**; xxx; xxx; O/P; N-R
Beg/Air/Tac
1

An arcade simulation.

Fleet Med
(Am/ST/I) **Simulations Canada**; J. Baker; 1991; $60.00; N-R
Air/Nav/Tac
1-2

A tactical simulation of naval conflict in the Mediterranean (1939-1943), it includes nine scenarios and a "design-your-own" feature.

Flight Deck
(C) xxx; xxx; xxx; xxx; N-R
Beg/Nav/Tac
1

An arcade simulation.

Flight Simulator II
(A/C/AM/I) **SubLogic**; Bruce Artwick; xxx; $49.95; **+
Adv/Air/Tac
1

The first and classic flight simulator, continuously updated for graphics and gameplay. More interesting as a civilian flight simulator; its World War I portion is ahistorical, slow and ponderous. *Red Baron* (cf. infra) covers the period in a far more intriguing fashion.

Flying Tigers
(A/Ap; #37) **Discovery**; David Weseley; 1982; O/P; 0
Beg/Air/Tac
1

A tactical air-to-air simulation of World War II

in the Pacific. Wire-frame graphics, lack of realism and limited play value are sufficient to deter anyone from further play.

Fokker Triplane Simulator
(M; #66) **Bullseye**; Donald A. Hill, Jr.; 1986/1989; $69.95; N-R
Int/Air/Tac
1

An early World War I flight simulator, it shows its age.

GATO
(C/Ap/Am/I; #5.2) **Spectrum Holobyte**; Ed Dawson and Paul Arlton; 1983; O/P; *+
Int/Nav/Tac
1

One of the first World War II submarine simulations, it was adequate in its time, but not exemplary in any regard. Time has not been generous to this product.

German Raider Atlantic
(Ap/I) **General Quarters**; Owen P. Hall, Jr.; xxx; $35.00; 0+
Beg/Nav/Tac
0-2; M

Poor graphics, poor documentation and poor gameplay characterize this product of surface naval combat in World War II.

Grand Fleet
(ST/I; #**63**) **Simulations Canada**; J. Baker; 1988; $60.00; **+
Int/Nav/Tac-Op
1

A simulation of fleet tactical operations in World War I (actually covering 1906-1920), totally without graphics. However, it remains one of the few products covering this period; it includes seven scenarios and a "design-your-own option."

Gray Storm Rising
(I) **ArkRoyal**; xxx; xxx; $19.95; N-R
xxx
xxx

Battles in the North Atlantic, World War II.

The Great Escape
(I) **Thunder Mountain**; xxx; 1986; O/P; *
Beg/Land/Tac
1

An arcade treatment of the famous Allied POW escape from Luft Stalag III (based on the book by Paul Brickhill [1950] and the movie [1962]). It was well worth its price ($9.95) when released, but it has not aged gracefully.

Great War 1914
(C/A) **DKG**; Marc Summerlott; 1986; O/P; **+
Int/Land/Op-Str
1-2

Primitive graphics and poor user interface mar this examination of the beginning of World War I. On the other hand, there are few simulations covering this period.

Guadalcanal Campaign
(Ap; #2.5,**5.4**) **Strategic Simulations, Inc.**; Gary Grigsby; 1982; O/P; N-R
Adv/Nav-Land/Op
1-2

Perhaps the first "monster" computer wargame, this covered the entire Guadalcanal Campaign, but in a tedious fashion. The subject has been covered in more recent simulations (cf. Gary Grigsby's own forthcoming *War in the Pacific*).

Guderian
(A/C//Ap; #38,**40**) **Avalon Hill**; Software Associates; 1987; $30.00; **
Int/Land/Op
1-2

A faithful adaptation of Jim Dunnigan's famous boardgame, it suffers from being an almost too literal translation. Slow-moving, the design had potential, but the programming did not achieve its objective.

Halls of Montezuma
(C/Ap/Am/I; #42,**45**) **Strategic Studies Group**; Roger Keating and Ian Trout; 1988; $39.95; ***
Adv/Land/Op
0-2

The Battlefront system writ once again, this covers the U.S. Marine Corps from the Mexican War through Vietnam, with emphasis on World War II. Battles include Belleau Wood (World War I), Okinawa and Iwo Jima (World War II) on brigade/divisional level operations. Editor Johnny Wilson loved the *Halls*; this reviewer is not as easily entertained.

Hellcat Ace
(A/C) **MicroProse**; Sid Meier; 1983; O/P; *
Beg/Air/Tac
1

Hide and Sink
(I) **Mirror Images Software**; xxx; 1983; O/P; N-R
Beg/Nav/Tac
1

Another *Battleship* (cf. infra) variation.

In Harm's Way
(C/Ap/Am/ST/I; #52,**57**) **Simulations Canada**; Bill Nichols; 1988; $60.00; N-R
Adv/Nav/Tac
1-2

Tactical naval combat in the Pacific from 1943-1944; nine scenarios and a "build-your-own" option.

Iwo Jima 1945/Falklands 1982
(C; #**34**,37) **Firebird**; John Bethell; 1985; O/P; *
Beg/Land-Nav/Op
1

Simulation of the amphibious operation in World War II, it made up in price value what it lacked in historical accuracy. However, it has aged poorly and offers little for the contemporary wargamer in either history or play value.

Jagdstaffel
(A/Ap; #37) **Discovery**; David Weseley; 1985; O/P; 0
Beg/Air/Tac
1

A tactical game similar to *Flying Tigers* (cf. infra), only occurring in the European Theater. Just as bad as *Flying Tigers*.

Kampfgruppe
(C/I/A/Ap/Am; #**5.2**,5.4,5.5,**25**,37) **Strategic Simulations, Inc.**; Gary Grigsby; 1985; $59.95; ***+
Adv/Land/Tac
1-2

A tactical simulation of warfare on the Eastern Front, this game was *CGW*'s Game of the Year in 1985. Multiple options, but marred by lack of joystick input and stacking (virtually an entire army can be crammed into a small geographic location). A classic that should be reworked in order to bring it up to contemporary standards.

Kampfgruppe Scenario Disk #1
(A/C) **Strategic Simulations, Inc.**; Gary Grigsby; 1986; O/P; **
Adv/Land/Tac
1-2

Five additional scenarios for *Kampfgruppe* (cf. infra). Historical accuracy is subject to question in some of the scenarios, and the basic game is capable of designing a player's own scenarios.

Knights of the Desert
(A/C//Ap/I; #3.4,37) **Strategic Simulations, Inc.**; Tactical Design Group; 1983; O/P; *+
Int/Land/Op
1-2

An operational simulation of Rommel's desert campaigns in North Africa during World War II, it was one of the first games to offer multiple stacking in the same hex. Slow and ponderous, its re-creation of the "African Campaign" does not deliver its potential.

Knights of the Sky
(I; #74,76,**79**,**83**) **MicroProse**; Jeffrey Briggs; 1991; $59.95; ***+
Int/Air/Tac
1-2;M

A World War I flight simulator whose greatest strength is the modem play option. While *CGW* gave it a rating of primus inter pares, this reviewer found the inability to fly on the German side, the graphic representation of "cloud cover," and flight models/damage to be less than optimal. Still a fine game, which suffers only by comparison to *Red Baron* (cf. infra).

Kriegsmarine
(Am/ST/I; #66,**67**) **Simulations Canada**; Steve Newberg and James Baker; 1989; $60.00; N-R
Adv/Nav/Tac
1-2

Tactical naval combat in the Atlantic between 1939 and 1944, with nine scenarios and a "build-your-own" option.

Kursk Campaign
(Ap/ST/I; #37) **Simulations Canada**; Stephen St. John; 1986; $60.00; N-R
Adv/Land/Op
1-2

A simulation of the largest tank battle of World War II (Operation Zitadelle, summer 1943).

Lafayette Escadrille
(T; #3.5) **Discovery**; David Weseley; 1983; O/P; N-R

?/Air/Tac
1

A WWI air combat game which provides ample evidence for why the company no longer publishes entertainment software.

Long Lance
(C/Ap/Am/ST/I; #43,**48**) **Simulations Canada**; Bill Nichols; 1988; $60.00; N-R
Adv/Nav/Tac
1-2

Tactical naval combat in the Pacific in 1942.

Lost Admiral, The
(I; #86,**88**) **QQP**; Bruce W. Zaccagnino and Thurston Searfoss; $59.95; 1991; ****+
Int/Nav/Tac-Op
1-2

"*Empire* goes to sea;" quicker than others of this genre, it offers a plethora of scenarios and randomization factors. Easy to play, difficult to master—it has the potential for real long-term utilization.

Companies

The companies whose products are covered in this article are listed below. Comments have been restricted to those companies still in business and with more than one product herein.

Accolade
550 South Winchester Boulevard
San Jose, CA 95128

Known for arcade products, and not overly serious as a wargame simulation company.

Avalon Hill
4517 Hartford Road
Baltimore, MD 21214

Well-known board wargaming company whose conversions to the computer medium have yet to live up to their boardgame standards.

Broderbund
17 Paul Drive
San Rafael, CA 94903-2101

Good graphics, but little output in the genre.

Dynamix
99 West 10th Street
Suite 337
Eugene, OR 97401

Excellent graphics and game play make this one of the quality simulation companies.

Electronic Arts
1820 Gateway Drive
San Mateo, CA 94404

Prolific game production company, gathering numerous subsidiary labels. However, quality is inconsistent and remains dependent on the individual subsidiary.

Electronic Zoo
3431-A Benson Avenue
Baltimore, MD 21227

The U.S. company is strictly involved in the importing and marketing of European titles.

Game Designers Workshop
P.O. Box 1646
Bloomington, IL 61702-1646

A board wargaming company whose early forays into the magnetic medium met with less than sterling success.

General Quarters
P.O. Box 1429
Torrance, CA 90505

A company featuring less than state-of-the-art games which are usually very playable and are continually improving incrementally.

Interstel
P.O. Box 57825
Webster, TX 77598

Aside from *Empire*, their track record is somewhat uneven.

Kesmai

Modem game production company on the major on-line networks.

Lucasfilm
P.O. Box 2009
San Rafael, CA 94912

Specializes in cockpit simulations; extensive graphics coupled with superb gameplay and ever-deepening complexity yield a classic product.

Merit
13635 Gamma Road
Dallas, TX 75244

A relatively new player, seeking to combine mass appeal with traditional subject matter.

MicroProse
180 Lakefront Drive
Hunt Valley, MD 21030

Specializes in point-of-view simulations (submarine [*Silent Service*], tank, airplane [*Knights of the Skies*]). Their documentation is always excellent; gameplay is also strong, although recently their competition has been gaining ground.

MicroPlay
180 Lakefront Drive
Hunt Valley, MD 21030

A MicroProse label.

Panther
PO Box 8
Hughes ACT 2605 Australia

QQP
1046 River Avenue
Flemington, NJ 08822

A new company whose products appear to be more game and less simulation; on the other hand, entertainment and playability are at a very high level.

RAW
3027 Marina Bay Drive
Suite 110
League City, TX 77573-2772

A new distribution label which has obtained the rights for several serious and detailed wargaming simulations, whose distribution heretofore has been somewhat spotty. While graphics and gameplay may not be as polished as the industry leaders, their products are very detailed.

Simulations Canada
P.O. Box 452
Bridgewater, NS
Canada, B4V 2X6

Grognard-type military simulations, with an emphasis on World Wars I and II. Zero graphics; their products use text and paper maps.

Spectrum HoloByte
2061 Challenger Drive
Alameda, CA 94501

One of the leaders in the productions of detailed and playable simulations.

Spinnaker
1 Kendall Square
Cambridge, MA 02139

A company which has recently de-emphasized its commitment to entertainment software in favor of education and productivity.

Strategic Simulations, Inc.
675 Almanor Avenue
Sunnyvale, CA 94086

The premier wargaming company—Although their lead products now emphasize the *D&D* genre, their wargames are usually well-researched and detailed, such that any serious wargamer would be well-advised to try some of their output.

Strategic Studies Group
1747 Orleans Court
Walnut Creek, CA 94598

An Australian wargame design company whose *Battlefront* system is utilized for many historical conflict situations. One of the more prolific design companies. Their house-magazine *Run 5* gives additional scenarios and design philosophies for most of their products. Any SSG user should make sure to read this magazine.

SubLogic
713 Edgebrook Drive
Champaign, IL 61820

The original publisher of flight simulation software.

Three-Sixty Pacific
2105 South Bascom Avenue
Suite 290
Campbell, CA 95008

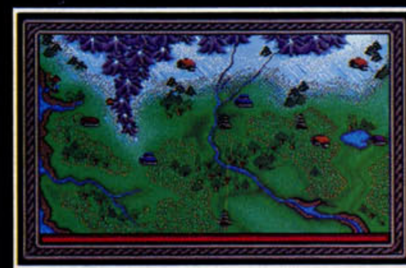
Publisher of a broad range of products, their games run from excellent (*Harpoon*) to less than satisfying (*Das Boot*).

US Gold
Same as Accolade.

Moribund: ActionSoft, ActionWare, Ark-Royal, Bullseye, CCS, Datasoft, Digital Kampf Gruppe, Discovery, Epyx, Firebird, Microillusions, Mindscape, Muse, Overt Strategic Simulations, SGP, Superware, Taito, Thunder Mountain.

If any readers have additions/corrections/modifications (particularly to help fill in missing data), please send them to me in care of this magazine or via modem on GEnie (address: M.E. Brooks). **CGW**



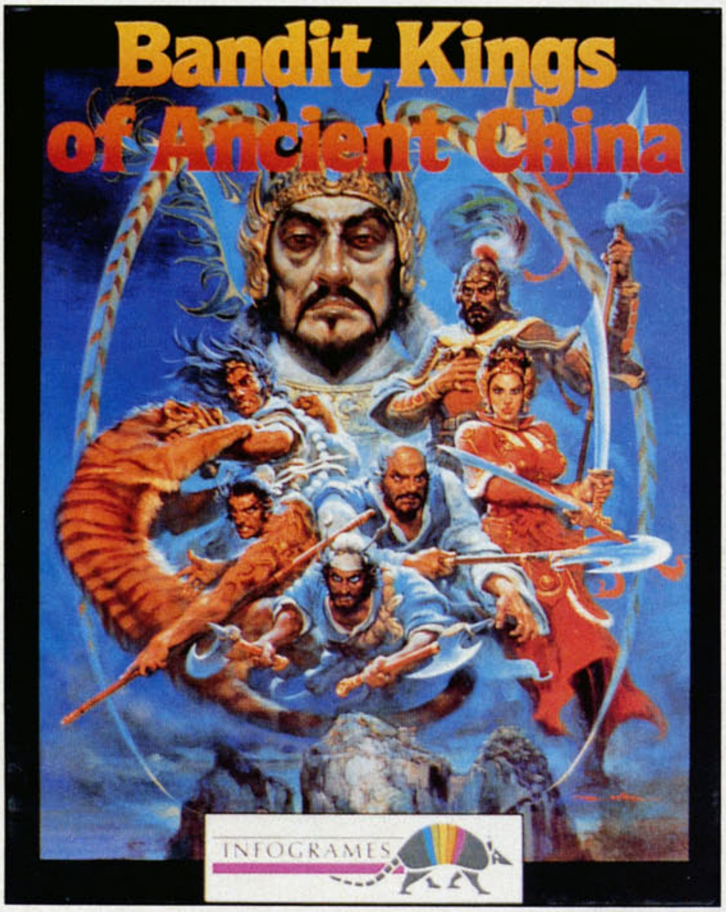






IBM 256 Color screens

Roger Hood's Guerrilla Boot Camp



B*andit Kings of Ancient China* is **Koei**'s interpretation of a famous Chinese novel covering a period of unrest in 12th century China. The game's goal is to overthrow a powerful, evil warlord who controls a large part of the country. This is a different objective from other Koei games (such as *Nobunaga's Ambition* and *Romance of the Three Kingdoms*) and it is a welcome change. Often, the end game in **Koei** games can be tedious because, long after the outcome is no longer in doubt, the player must still mop up every last province to finish.

A western analogy to the Bandit Kings story is Robin Hood. In both cases a good ruler has unwittingly left administration of his country to a ruthless, unscrupulous minister and the country is groaning for relief. Also, in both cases, relief must come from outside the law — the cry goes out for a hero. In *Bandit Kings*, the player takes on the role of that hero.

Order of Business

As in other Koei games, one's action points reside in the people and prefectures (provinces) controlled. Heroes have body points that are consumed when the hero attempts actions and are restored when he or she rests. The heroes do their deeds in prefectures and each prefecture can be the site of only one action per month.

The first order of business for successful guerrilla leaders is to recruit heroes and secure their loyalty. The second is to settle heroes in prefectures and build the productivity of a given prefecture. The third task involves building enough military forces to combat Gao Qiu's hirelings and, finally, the fourth task involves assembling the force that will oust Gao Qiu and end the game.

Matriculation of Merry Men

Outlaws and lower-class heroes, such as innkeepers and wrestlers, are the best initial prospects. These people are easily recruited, while higher-class prospects will only become receptive after one has acquired more prefectures and popularity. For instance, it takes about six prefectures or sixty popularity points to interest officer-class heroes.

Once recruitment is completed, the next task should be familiar to Koei players: gaining their loyalty. The quick and dirty way, of course, is to hand out money. In *Bandit Kings*, however, the results are not as straightforward as they are in other Koei games. That is, sometimes one's "merry men" simply do not stay bought. The loyalties of one's followers change with time, for better or worse. Fortunately, there is another way to build loyalty. One can place a hero in charge of a prefecture. This usually brings a steady increase. The final step in gaining loyalty is to swear brotherhood with a hero. Once this is done, the hero's loyalty is fixed at 100 and it is possible to command that brother (or sister) directly, even when they are located in a different prefecture than the player's character.

The "Johnny Appleseed" Strategy

For the first part of the game, the player's hero should probably adopt a "Johnny Appleseed" posture by wandering from prefecture to prefecture, planting seeds of resistance by recruiting heroes. Since using the "Move" command is preferable to using the "Flee" command during this operation, one should settle the player character as soon as possible and use the "Move" command thereafter.

If the player can help these recruits to collect enough food and money to raise their peasant support to just over 40, the recruits will be able to collect taxes, but still avoid the greedy eyes of Gao Qui's hirelings for a while.

One should *always* keep an eye on the loyalties of the recruits. The easiest way to do so is to use the "Give" command in order to check current status, but to cancel the order if there isn't anyone with low loyalty listed in that prefecture. Naturally, one should apply cash as needed if low loyalties are spotted.

Once the recruits have established themselves, it is a good idea to make a return pass with the player's character, collecting new recruits and swearing brotherhood along the way.

Dealing with Greedy Gao Qiu

Gao Qiu and his cronies are on the lookout for heroes making a name for themselves — heroes that have pushed high their support in an adjacent prefecture. Each turn, they scan prefectural support. When they see one high enough, they demand a bribe. If the bribe isn't paid, they sometimes attack.

Rules of thumb: 1) Early in the game, it is possible to keep prefectural support near the 40 level in prefectures adjacent to those of Gao Qui's people and not be

Winning at Bandit Kings of Ancient China

by Roger White

bothered. Prefectures which are not adjacent may be pushed up to 100 as soon as possible. 2) One fully equipped hero can't fend of the average Gao Qiu attack, but four can (at least, they can until late in the game or until they are attacked from a couple of different prefectures with no recovery time. Gao Qui's cronies won't attack empty prefectures. So, if you need a respite, put some distance between you and them. 3) When Gao Qui's cronies attack, they throw most of their armies into the attack itself. This, naturally, leaves the home prefecture relatively unguarded, with only two to three hundred men. One can mitigate a lot of the damage that a Gao Qiu crony does when he gets "on a roll" by simply taking away these relatively undefended provinces left behind his offensive effort. The territories themselves will have lots of gold and food in them and that can turn an entire game around.

The Tao of War

When players assault another province, they are likely to find the cronies fairly inactive. Given a choice, they'll hang around in castles. It is best to defeat them in detail: surround each strong point in turn with as many units as can possibly fit. Then, before beginning the series of melee assaults, note that the crony will often move to attack one of the player's strong units sitting in an adjacent castle or on a hill. If so, one should be thankful; this consumes his men much faster than when the player's units assault him in the castle itself.

It is also advisable to launch archery attacks initially. In this way, one can leisurely wait, unless there are other pressing matters, until the bad guy's unit is three quarters to half of the player's strength before the melee assaults become necessary.

Wise generals will soon learn to attack the weak positions first. This is because the leaders of the stronger units will sometimes panic and flee as their weaker partners are ground into the dust. It is also important to learn to coordinate the final attacks against a unit so that the unit's strength drops to zero during the player's attack round. This allows one to capture the opposing "hero" rather than have him or her run off to fight another day. If necessary, players can have their archery units — usually still at full





strength — charge in to deliver the *coup de grace* in the final round.

When players find one of their units knee-deep in fire, it will be necessary to either use the "Extinguish" command or "Flee" the square. Experienced commanders will learn to "flee" the square, but stay in the battle, by using the "Charge" command and charging sideways.

Players should also realize that they do not have to win every campaign. It is sometimes necessary to attack a prefecture in order to soften it up for a subsequent assault. The wise general may find himself/herself going in; capturing any weak units; using lots of archery against non-archery units and retreating via the "Flee" command. Players will also face the problem of wanting to attack a weak prefecture without being forced to leave a prefecture unguarded from assault by a strong enemy prefecture. In this case, the player should attack the weak prefecture with up to all but one of his/her units. When the contest is nearly ended and the cronies are down to one weak unit, it is time to use the "Flee" command to send *most* of the heroes back to the prefecture that only has one unit. This will enable the player to cover the prefecture which was left behind *and* still finish off the last unit in the prefecture to be seized. (One must be careful when using this trick that the cronies don't decide to flee at the outset without giving the player a chance to fight!)

Highway Robbery

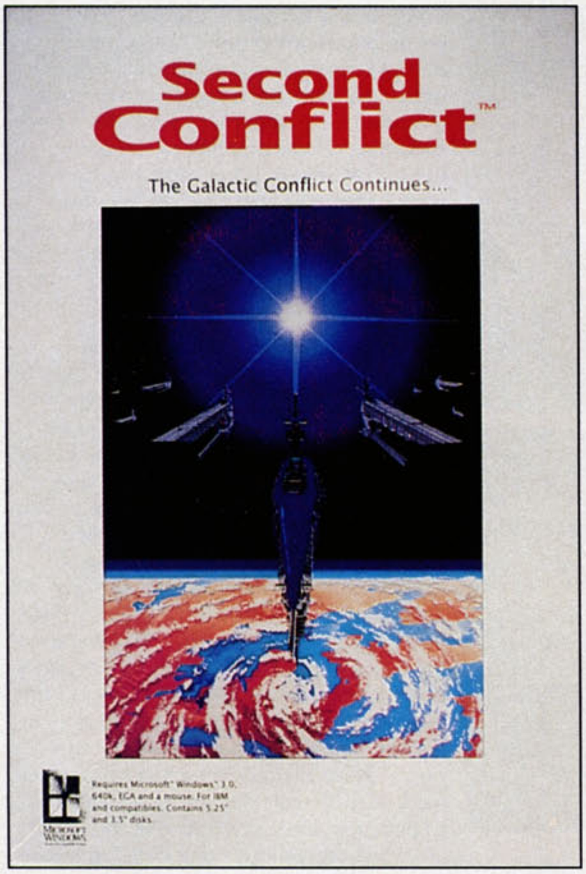
In the middle and end games, the player will need to garner most of the available wealth from conquering the prefectures of Gao Qiu and his cronies. In addition to badgering the player's character and the other good fellows, Gao Qiu is always busy building up his prefectures and recruiting heroes at a pace human players cannot hope to match. To derail this express train to domination, players will need to take his prefectures and heroes from him. Winning a prefecture long held by Gao Qiu showers one's character with food and gold in the thousands, not to mention all those heroes which have been captured by one's clever battlefield tactics (okay, they were mentioned!). In two months (a turn to hire men and a turn to visit the shipyard and smithy) one can convert these gains into a larger and better-armed, but still untrained, army. Then one can continue to expand.

An army of eight heroes can overcome most Gao Qiu garrisons. This liberation army can run out of steam for a couple of reasons. First, Gao Qiu's provinces are rich, but the player's support starts at zero. The people won't pay taxes until some hero takes the time to raise the support level. Second, if Gao Qiu gets behind the player's army and manages to retake a prefecture, it will be a poor prefecture when the player is able to drive him off. Also, one is likely to have a shrinking, hungry army instead of a growing, rich one after a battle to retake a province. Third, there is the rock of Gao Qui's home prefecture. Players can't take it, but he can sally out at any time.

Most Worthy Reward

Players who take the time to master these strategies will find themselves worthy of the title "Bandit King." They are most likely to create their own legends of guerrilla warfare. **CGW**

The Empire Strikes Fast



jSoft's Second Conflict

by Dana L. Cadman



TITLE:	Second Conflict
SYSTEM:	IBM with Windows
# PLAYERS:	1-10
COPY PROTECT:	Document Look-Up
PRICE:	$49.99
PUBLISHER:	jSOFT P. O. Box 2822 Norcross, GA 30091

Space may be a big place, but no matter how *much* space any given empire may own, it wants more. This self-perpetuating aggrandizement creates a conflict – in the case of **jSoft**'s new space conquest game, a *Second Conflict*.

Second Conflict is a strategy game of interstellar conquest which can accommodate up to ten human and computer players. The playing map includes up to twenty-six stars with one to ten habitable planets in orbit around each. Each player starts with one star and a randomly generated number of ships, defense systems and factories. The Empire owns the rest of the universe. From there on it's a struggle against the Empire and one's neighboring systems.

Like most of the games in this genre, each system generates a certain amount of production points that are spent each turn. At the novice level, a player can buy warships, transports or more factories. At higher levels, the player has other options, such as stealthships. Stealthships cost more to produce than warships, but they fire before warships in combat and make excellent scouts.

Defense systems cost the same as warships and don't move, but they do fire before everything else in combat except missiles. If purchased in sufficient number, the defense systems will also act as an early warning system, warning a player of invading fleets or incoming missiles.

Missiles cost as much as warships. They launch before everything else, but are one-use weapons. As a defensive weapon, a missile can act as an interceptor and knock out incoming missiles.

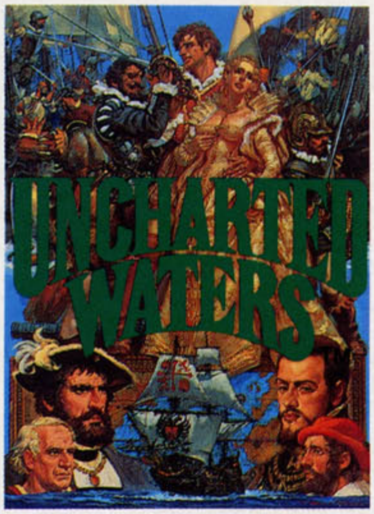
The player can also choose to vacuum up the rubble in the solar system and build more planets. Of course, the more planets already in a system, the less rubble there is, so the longer the construction will take. Adding planets increases the number of factories and defense systems that can orbit a star. It is also one more world to pull troops from.

Troops board transports and travel to other systems, where they unload and invade planets; they can also be used to defend planets and run the factories. A player who has decided to invade a neighbor had better take along extra troops to ensure victory. Defeat means not only the loss of troops, but the loss of production as well.

Unlike many other games of this genre, technology does not enter into the strategy of the game. There are no research facilities to build or research points to spend on advanced weaponry or new stardrives. *Second Conflict* is a game of placement, movement and numbers. The fastest with the mostest wins.

One of the best differences between *Second Conflict* and other games of stellar conquest is that moves are handled simultaneously, not serially. This makes it possible for fleets to pass each other – a fleet could leave a planet as another group in-

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- Battery Back-Up
- Enhanced Microchip For Better Graphics And Game Play



PC Version
- 640K
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- Ad-Lib Sound Board Support
- Mouse Support



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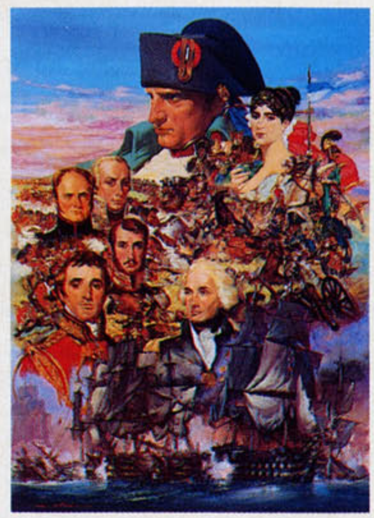
NES Version
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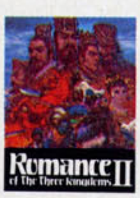


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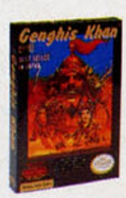
Romance of The Three Kingdoms II



Nobunaga's Ambition



Nobunaga's Ambition II



Genghis Khan



Bandit Kings Of Ancient China

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vades or two players could coordinate an attack against a third player's fleet.

Second Conflict's computer players do not all use the same tactics. Some can be highly aggressive, while others are defensive. Some are opportunists that will wait for others to do battle before coming in to clean up the pieces. Another computer personality is quite content with what it owns, but proceeds to destroy what every one else has, only capturing planets when they involve no risk.

The personalities are randomly generated at the beginning of the game and fluctuate as the players move up and down on the scoreboard. A computer player that is doing well might go into an aggressive mode, where one lower on the scoreboard may suddenly become defensive.

The scenario editor is another nice feature. This allows a player, or a group, to define the context of the game. Stars can be deleted, moved or added to a maximum of twenty-six stars. The number of initial planets, ships, missiles, troops and defense systems can also be set. Computer personalities can also be set to one initial type or frozen so that they retain that personality throughout the game, regardless of how well or how poorly the computer opponent may be doing.

In addition, the scenario editor can be used to define the victory conditions of a game. A game can be as simple as declaring the player with the most points on turn 150 to be the winner or determining that the first player to reach 5000 points will be the top admiral. Victory conditions can be set to make multiple winners possible. In contrast, it might even be possible to have no winners at all. Astrography comes into play if a winner has to have a certain number of points and a particular star system to win the game.

Second Conflict is easy to learn, as there are few rules to contend with. In addition, the game runs under *Windows 3.0*, so it is very mouse-oriented and easy to use. Moving fleets, attacking and changing production are all handled through the menus and icons.

The only drawbacks to the game involve the manual and combat. Whereas the manual does a good job of telling the player what *can* be done, it is sadly lacking in examples of *how* things are actually done. The manual is only a few pages long, but the incredibly small print can rapidly induce an eyestrain headache in those who wear bifocals.

As for handling combat, the major problem is that there is no retreat in this game. Once a player starts an attack, the only way to finish it is for one side to be destroyed or captured. Occasionally, a fleet hits a muon cloud, sending said fleet in the wrong direction by, presumably, fouling the star drive. Even so, it seems that a small fleet will, invariably, end up at a heavily reinforced system and end up as target practice for the Empire.

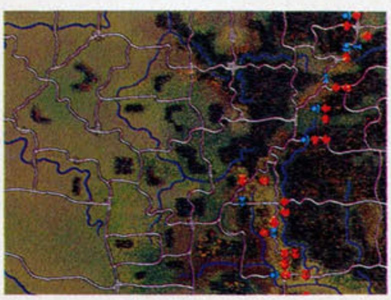
Second Conflict is a great game for those who abhor complex rules or enjoy games with short turns. For those who like to define the arena for a battle by changing the victory conditions to fit one's mood, *Second Conflict* is a must. And remember, there is no such thing as a benevolent Empire. CGW

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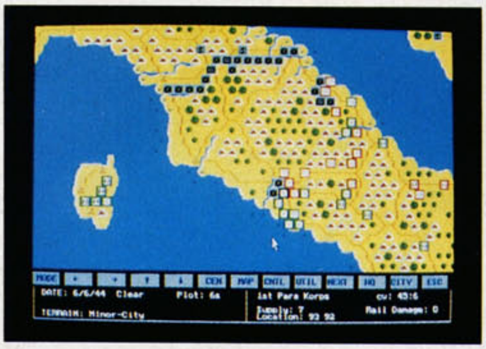


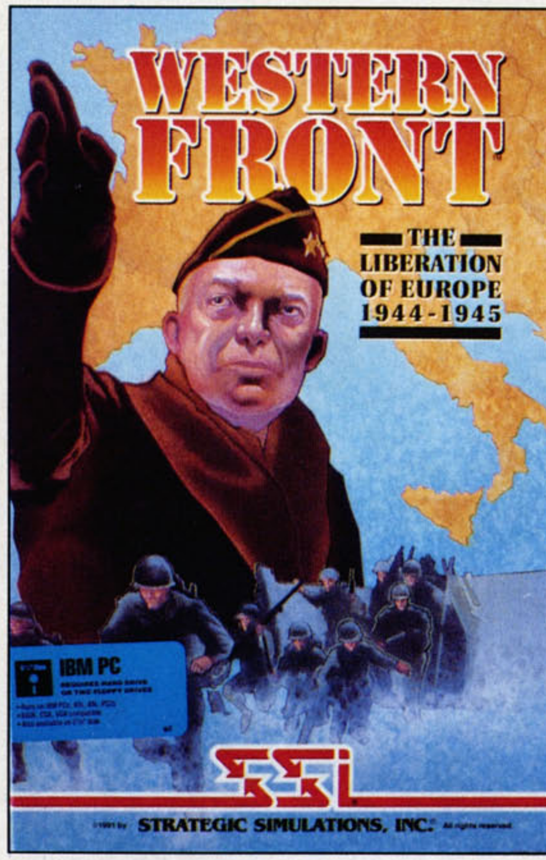
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All's Violent on the *Western Front*

TITLE:	Western Front: The Liberation of Europe, 1944–1945
SYSTEM:	IBM
COPY PROTECT:	Document Lookup
PRICE:	$59.95
DESIGNER:	Gary Grigsby
DEVELOPERS:	Joel Billings and Dave Landrey
PUBLISHER:	Strategic Simulations, Inc.





A Review of SSI's Most Detailed Wargame

by Alan Emrich

More than just a sequel to designer Gary Grigsby's illustrious predecessor and sister-game *Second Front: Germany Turns East*, *Western Front: The Liberation of Europe, 1944-1945* adds many new features which wargamers will gladly embrace. This new simulation from faithful wargame publisher **SSI** has hit the shelves the way the Allies hit the beaches, and today is D-Day to examine it.

Back for "Seconds"

Like *Second Front*, *Western Front* covers a huge area of operations during World War II, this time at roughly half the game scale (10 miles per hex, instead of 20; 3- or 4-day turns rather than the "one week" turns of its predecessor). *Western Front* retains the same essential *feel*, to be sure, but there are many more brigades and battalions filling the "corps" counters which serve as the units of maneuver in *Second Front*. Hence, one gets an impression of the game's new reduced scale just from examining the order of battle. In fact, many of the pieces which players maneuver around the map are now merely divisions themselves, which can only receive support sub-units (tanks, artillery, anti-aircraft and others in very small amounts of strength) in addition to the single division!

"If This is Hex 90,11, it Must be Berlin."

Aside from a single high-density disk, *Western Front* includes a greatly enhanced rules book. Much lambasting was done over the scant and erroneous documentation included with *Second Front*. Clearly **SSI** has learned a lesson here. The new rules manual is far more complete, and offers many insightful formulae and tons of tables guaranteed to please the wargamer/analyst. While not the most "user friendly" of documentation, its target audience of hard-core wargamers will probably not only be unruffled while studying, but actually get excited at the menu-by-menu design of the rules layout (which is designed, appropriately, for reference, rather than study).

Where the package completely falls down, however, is with the lovely, colored insert card of the game's map which players will constantly need to refer to during play. Checking one's production and bombing damage each turn is a must and this, added to the necessity of taking complete overviews of the strategic situation in order to determine avenues for attacks, lines for defense and pondering landing sites, mandates the importance of the player reference map. The problem, however, is that no such map is included in the game! The only way one can find a city is



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to scroll around and guess *or* look up the x,y coordinates, scroll around and guess. Without a map insert card to laminate and take notes on, players will find themselves rechecking many informational items during the course of a game of *Western Front*, cross-checking that could have been eliminated with provision of a map. Players will be putting in plenty of (well-rewarded) effort just to play *Western Front*. The missing map seems an unnecessary burden.



Changing Situations

Three scenarios and a campaign game are included in *Western Front*: Diadem (covering only the Italian theater of war as the Allies slog their way to and through the Gothic Line); Breakout (limited to France and covering Patton's famous "Red Ball Express" drive to the Rhine); Bulge (a short scenario on the German counter-attack in the Ardennes which seems a bit strained as a simulation on this game's scale) and Overlord, the campaign game. The latter is really the heart and soul version of *Western Front* and is a satisfying (albeit exhausting) experience for any grognard to play. However, those who like to play wargames in order to explore historical alternatives might be disappointed. No 1943 scenarios have been provided for (the Allies were planning on an earlier invasion to help the Russians), nor is the possibility of ignoring the Italian theater all together and jumping straight into France. Another historical alternative might have the Germans victorious in Russia and the Allies facing a much tougher landing. Those situations were not provided for, nor is there any type of "design kit" included for wargamers with great ambition (and even greater amounts of time).

New Strategic Elements

In spite of grognards living up to their name (i.e. grumbling) and complaining about what is *not* in the game, honest gamers will admit that *Western Front* contains many new and exciting improvements to the *Second Front* game system. For instance, Political Points have been added to the game. With the Allies gaining two per turn and the Germans three (nine after Paris falls), political points are spent to replace HQ commanding officers (each now has a "political rating," which is the cost to replace them), transfer "politically sensitive" units (for the Germans), and to have Allied strategic bombers go after more operational-level targets such as airfields and bridges.

The Allies must also worry about "strategic transportation" limitations. Each turn, amphibious prep points and paradrop prep points accumulate for the next "big assault." Thus, it will take the Allied player some "build-up" time before launching a second invasion (which historically took place in southern France). Fortunately, landings are made easily by indicating a future landing zone (or drop zone for paratroops) and then waiting to build up sufficient points to make a "move" (like the kind used to march troops around behind friendly lines). No complex procedures are involved, and players can be hitting the beaches shortly after breaking open the rules book.

The undocumented (but allowed) "bombardment attacks" of *Second Front* are included and documented this time, as are the details of combat results such as "bounce," "retreat" (which larger units will not do—instead shattering one of their formations and holding the ground), "shatter" and "surrender."

Off-map events (such as the shattering of German divisions on the Russian front), automatic disorganization checks for large, unwieldy formations, "automatic piloting" of unassigned Allied air groups (the AI assigns them useful missions for those not inclined to bother) along with Allied Strategic Bombing and the limitation on which Axis HQs can be activated all add new challenges for players of *Western Front*. One interesting (and irreversible) feature involves altering the game scale during play. Presently, the game is half the scale of *Eastern Front* and operates on 4-day turns. Players may alter this to 3-day turns during play. This reviewer suspects many still undiscovered nuances with this feature and suggests players experiment with its effects.

Menu Sans Cuisine

The best new feature to the *Second Front* game system is the inclusion of a mouse interface. For those of a keystroke bent, the back of the rules book still includes a command summary of all the keystrokes which can activate the game's features (like everything else, this one is more complete than *Second Front*'s). Nevertheless, the new mouse support built into the game system almost guarantees that a player's hand never has to touch the keyboard again.

The mouse support is a good thing for many reasons, but the most important ones quickly become apparent as one discovers both the need to constantly scroll along the multiple "front" nature of the playing board and the prudence of continually accessing the many (and many new) informational windows.

"Praise the Lord and Pass the Ammunition"

Industrial output in *Western Front* is staggering when compared to those oft-played early turns of *Second Front*. One has only to call up the "Show USA Factories" menu to be in awe at how the replacement pools can really get going. *Western Front* appears to be very hard on equipment losses, however, so things tend to even out.

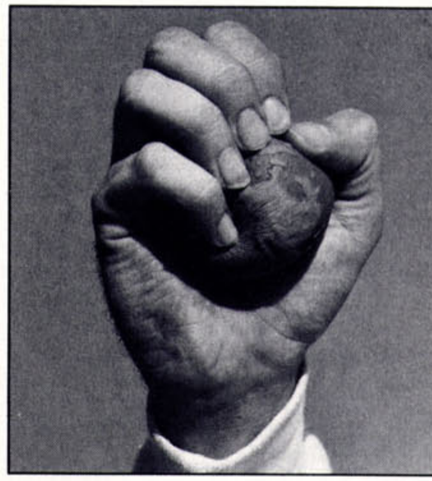
Of special importance to veteran *Second Front* players is that there is no direct adding of new unit types to friendly formations. No longer can players instantly install the finest, newest tanks on the front at the exact spearpoint of an attack. The computer manages this now, using its own (and usually more realistic) logic. Players may still manipulate *what* is produced, just not where it is assigned.

Cities also produce a vital new commodity: manpower. During these latter war years, Russia, Germany and Britain (in particular) felt the effects of a manpower shortage. This is now reflected in the game, such that losses in personnel are now more to be dreaded than losses in material. Sadly, manpower points are one particularly vague point in the documentation and players are left to wonder what the exact consequences are of a manpower shortage.

VE Day

Western Front is another milestone achievement in computer wargaming from the prolific keyboard of long unsung Gary Grigsby. Because Mr. Grigsby often sets the standards for computer wargames, one seldom sees his games in terms of revolutionary design breakthroughs, but rather as evolutionary advances in computer wargaming's "state of the art." *Western Front* is another such advance. For those of us raised on "Grigsby Games," it is time to advance "once more into the breach." CGW

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Those wishing to place their own (free) ads need only send us a postcard (or use the *Notes* section of the RID card), letter, fax or E-Mail, etc. Generally, we run them only once, so send another to keep your name listed! The ads themselves should serve as reasonable examples as to how to write your own. However,

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Opponents wanted for *XSHIP*, a space conquest strategy game. The game is played via BBS with two to ten players per game. Game turns update as fast as the players take their turns. For more information, call the **Battlefield BBS** in North Babylon, NY at (516) 669-0522 300/1200/2400 8-N-1.

Wargamers Addicted to Strategic Play ("WASP") invites you to call the Wizard's Tower BBS, home of the Modem Warriors. Tournaments and opponents for ***Command HQ***, ***Modem Wars***, ***688 Attack Sub***, ***Knights of the Sky*** and more. Find an opponent at (901) 757-2711 (2400,8,N,1), which is the Memphis, TN area. Mention this ad in *CGW* and get access to the WASP message base!

Call **The Imperium BBS**. We run tournaments for ***Command HQ***, ***Knights of the Sky***, ***Fireteam 2200***, ***Modem Wars*** and many more. On-line games are available, too! Call one of our three nodes in Middleton, NJ at either: 1200/2400 (908) 706-0342; 9600 v.32 (908) 706-0305; HST Dual Standard 38.4 (908) 706-0321. We have 650 megs online.

By Area Code

Desperately need grognard for ***Second Front***, either face-to-face or via mail. Will also play other WWII games in the local area. Please call Doug in Hanford, CA at H-(209) 582-0133.

Wargamer of above average skill and experience seeks local opponents for modem play of ***Command HQ*** and for face-to-face computer and/or tabletop games of war and/or strategy. Call Richard in New York City at H-(212) 362-3638. If I'm not home, please leave a message.

Intermediate level gamer seeks *local* opponents in 215 area code for ***Command HQ***, ***Falcon 3.0***, ***Knights of the Sky*** and ***Modem Wars***. Call Everett at home in Philadelphia, PA: (215) 643-4997.

Modem gamer seeks opponents for ***Command HQ*** or ***F-29 Retaliator***. Will also meet for face-to-face games of ***Squad Leader***, ***Rise and Fall of the Third Reich*** and other wargames. Willing to try new modem-to-modem games, but they must support COM4. Call Rob at H-(215) 259-4128 or W-(215) 823-1436.

Gaming combat aerialists are asked to trade experiences flying ***Their Finest Hour***, ***Knights of the Sky*** and ***Red Baron***. Write Charlie Kilbourne at 14706 Willoughby Road, Upper Marlboro, MD 20772; or call H/W-(301) 627-3741.

Modem opponents wanted for ***688*** or any other game. (I'll buy it, if need be.) Local (Oakland, CA) opponents preferred. Call Tim Taylor at H-(408) 395-0963.

Command HQ opponents sought in local area. Call Simon in Albany, CA at H-(415) 528-5327.

Wanted: Members for the **Northwest Ohio Games Club**. Meetings are the 2nd and 4th Sundays, 12-6pm at Wright State University Lake Campus Cafeteria, Celina, OH. We play all types of board and computer games. Write John S. Price at 8290 St. Rt 117, Mendon, OH 45862 or call H-(419) 795-7487.

Command HQ players sought for confrontation in the West. Available weekends and evenings. Tim Kilmer, Tucson, AZ. H-(602) 885-1384.

Experienced computer gamer seeks opponents for ***688 Attack Sub***, ***F-29 Retaliator***, ***Falcon AT*** and ***Knights of the Sky***. Call Josh in Laguna Niguel, CA at H-(714) 643-2906.

Local opponents sought for ***Command HQ***, ***Knights of the Sky*** and other modem games. I would also play other games face-to-face, including ***Diplomacy*** and ***Warlords***. Contact Pete in Tinley Park, IL at H-(708) 614-6465.

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Changing Our Poll Tack



State of the Magazine: Our tenth anniversary brings a change in how we present *Computer Gaming World*'s Top 100 Games. When we started our game ratings poll back in March of 1982, we came up with the name "Reader Input Device" or RID. RID was not a very catchy title. It was intended to get us by for a few issues until we came up with something better. Well, we got real busy with the magazine. So, here, nearly 10 years later, we are finally getting around to changing the name (thus setting a a new world's record for procrastination). Since the game ratings in *Computer Gaming World* have become an industry fixture and since those ratings come from *polling* thousands of readers each month, we have decided to call our game ratings "device" the **CGW Poll** *[Ed. Note: insert trumpet fanfare here]*.

The color graphs on the *CGW* Poll pages (center of the magazine) depict the top three games in each of our six categories. The graphs display the cumulative *CGW* Poll (formerly RID) rating for each game during the four most recent ratings. For example, the red bar on *Wing Commander* represents the current Poll rating (as printed on the Poll page). Beginning with the next issue, the ratings will be based on a "moving average" which will be more statistically significant.

In each issue we will ask our readers to re-rate those games that appear on the "top three" graphs. However, it will take a couple of issues before the impact of this will be visible. Those games in the graphs that show no change over the four-month period were not re-rated during that time. They will be re-rated now. A game that only has a red bar (like *Yeager Air Combat*) is new to the rating system and "opened" among the top three.

We feel that the graphic representation of the top three games will add to the overall usefulness of the *CGW* Poll. We encourage everyone to rate the games listed (right next to the post card) and send in the *CGW* Poll card each month and let fellow gamers (*and the manufacturers!*) know which games are winners and which are losers.

State of the Industry: Looking at the current state of the computer game industry is a lot like watching a videotape when the VCR is on "Pause." Most of the traditional publishers are anxiously watching to see how those extremely important Christmas sales are going to be and simultaneously nudging their development teams onto new platforms. With **Electronic Arts** paving the way into the true 16-bit videogame world on the **Sega Genesis** and much of the rest of the industry banking heavily on the **Super NES** launch, gamers should expect to see plenty of titles they would never have expected to see on the new videogame platforms. What this will mean for computer entertainment is as fuzzy as that still picture with video noise when the VCR is paused.

Some companies will continue to "bet" on high-end, technologically advanced systems. Since there will always be "techies," early adopters of the latest and greatest techno-wonders, there will always be something of a market for games that really showcase the new technologies. Nevertheless, one has to wonder whether the fast pace of technological advancement will not weed down the installed base of computer gamers faster than it can grow (i.e. leave too many potential customers behind).

It is a nervous time for those of us who are committed to state-of-the-art games on personal computer platforms. We have looked to better graphics, optical storage and faster processors as the answer, but should publishers back off from their development plans to chase the "sure" dollars of videogame entertainment, there may no longer be anyone asking the question of how to recruit more computer gamers into the market. **CGW**


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